Health Care for the Homeless

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Bibliography #10

Dual Diagnosis

January 2003

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Policy Research Associates, Inc. • 345 Delaware Avenue, Delmar, New York 12054
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2002

Egelko S, Galanter M, Dermatis H, Jurewicz E, Jamison A, Dingle S, De Leon G. **Improved psychological status in a modified therapeutic community for homeless MICA men.** J Addict Dis 21(2): 75-92, 2002.

An adaptation of the drug-free therapeutic community (TC) model to homeless men with comorbid mental illness and chemical addiction (MICA) was evaluated with respect to change in psychological status over the course of a six-month residential treatment. Psychological status was assessed by: the Symptom Checklist-90-R (SCL90-R), Beck Depression Inventory (BDI), Shortened Manifest Anxiety Scale (SMAS), and Tennessee Self-Concept Scale (TSCS). A total of 52 out of an original study cohort of 124 residents were followed in longitudinal analyses to treatment midpoint, with a subset of 34 assessed through treatment completion. Significant, widespread psychological improvements were found during both the first and second half of treatment; it would appear that distress reduction was ongoing throughout treatment, with intrapersonal preceding interpersonal relief. The premise of applying a socially-based treatment to this population is discussed in light of these findings.

Goering, P, Tolomiczenko, G, Sheldon, T, Boydell, K, Wasylenki, D. **Characteristics of persons who are homeless for the first time.** Psychiatric Services 53(11): 1472-1474, 2002.

This article is based on a study done by The Pathways Into Homelessness project in Toronto, which interviewed adult users of homeless shelters to identify characteristics of individuals who are homeless for the first time. The authors state that there were more similarities than differences between those who were homeless for the first time and those who had been homeless previously. The prevalence of psychiatric and substance use disorders and the rate of previous hospitalization did not differ between people who were homeless for the first-time and those who had been homeless before (authors).

Gonzalez G, Rosenheck RA. **Outcomes and service use among homeless persons with serious mental illness and substance abuse.** Psychiatr Serv 53(4): 437-446, Apr 2002.

OBJECTIVE: This study compared baseline characteristics and clinical improvement after 12 months among homeless persons with a diagnosis of serious mental illness with and without a comorbid substance use disorder. METHODS: The study subjects were 5,432 homeless persons with mental illness who were participating in the Center for Mental Health Services' Access to Community Care and Effective Services and Supports (ACCESS) program. Analysis of covariance was used to compare clients who had dual diagnoses and those who did not and to identify any association between service use and clinical improvement. RESULTS: Follow-up data were available for 4,415 clients (81 percent). At baseline, clients with dual diagnoses were worse off than those without dual diagnoses on most clinical and social adjustment measures. Clients with dual diagnoses also had poorer outcomes at follow-up on 15 (62 percent) of 24 outcome measures. However, among clients with dual diagnoses, those who reported extensive participation in substance abuse treatment showed clinical improvement comparable to or better than that of clients without dual diagnoses. On measures of alcohol problems, clients with dual diagnoses who had a high rate of participation in self-help groups had outcomes superior to those of other clients with dual diagnoses. Clients with dual diagnoses who received high levels of professional services also had superior outcomes in terms of social support and involvement in the criminal justice system. CONCLUSIONS: Homeless persons with dual diagnoses had poorer adjustment on most baseline

measures and experienced significantly less clinical improvement than those without dual diagnoses. However, those with dual diagnoses who received extensive substance abuse treatment showed improvement similar to those without at 12 months.

Levounis, P, Galanter, M, Dermatis, H, Hamowy, A, De Leon, G. **Correlates of HIV transmission risk factors and considerations for interventions in homeless, chemically addicted and mentally ill patients.** Journal of Addictive Diseases 21 (3): 61-72, 2002.

A study was conducted to ascertain correlates of HIV high risk behaviors and attitudes toward HIV. A questionnaire was administered to 103 men living in modified therapeutic community (TC) for men who are homeless, chemically addicted and mentally ill. The psychiatric diagnoses of the sample population included psychotic disorders, depressive disorders, and bipolar disorders. Forty-two percent reported that their primary substance of abuse was cocaine and another 40% named alcohol as the substance to which they were most addicted. Two logistic regression analyses were conducted, one with needle sharing as the outcome measure and one with endorsement of the need for lifestyle changes to reduce risk of HIV transmission. Cocaine users were 3.4 times more likely to have shared needles than the rest of the sample. Patients who had a history of sexually transmitted diseases were 17 times more likely to endorse the need for lifestyle changes. The level of HIV transmission knowledge was unrelated to HIV risk behaviors or attitudes (authors).

Stein, J, Leslie, MB, Nyamathi, A. **Relative contributions of parent substance use and childhood maltreatment to chronic homelessness, depression, and substance abuse problems among homeless women: Mediating roles of self-esteem and abuse in adulthood.** Child Abuse and Neglect 26(10): 1011-1027, 2002.

This article is based on a study that explores simultaneously the relative effects of childhood abuse and early parental substance abuse on later chronic homelessness, depression, and substance abuse problems in a sample of homeless women. The authors also examine whether self-esteem and recent violence can serve as mediators between the childhood predictors and the dysfunctional outcomes (authors).

Substance Abuse and Mental Health Services Administration. **Results from the 2001 national household survey on drug abuse: Volume I. Summary of national findings; Volume II. Technical appendices and selected data tables.** Rockville, MD: Substance Abuse and Mental Health Services Administration, 2002.

This report provides the first release of information from the 2001 National Household Survey on Drug Abuse (NHSDA). This survey is a project of the Substance Abuse and Mental Health Services Administration (SAMHSA). Initiated in 1971, the NHSDA has become the primary source of information on the use of illicit drugs, alcohol, and tobacco by the civilian, non-institutionalized population in the U.S. The NHSDA interviews approximately 70,000 people age 12 years or older, in every State, over a 12-month period. Due to the size of the survey, it is possible to make relatively precise estimates of many variables of major interest. In addition to extensive questions about the use of substances, the 2001 version of the survey included questions on mental health status and treatment. This initial report presents only national estimates; State estimates will be presented in future reports (authors).

Substance Abuse and Mental Health Services Administration. **SAMHSA report to congress on the prevention and treatment of co-occurring substance abuse disorders and mental disorders.** Washington, DC: Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services, 2002.

This is a report to congress on the prevention and treatment of co-occurring substance abuse disorders and mental disorders. It includes: a summary of the manner in which individuals with co-occurring disorders are receiving treatment, including the most up-to-date information available on the number of children and adults with co-occurring disorders, and the manner in which Federal Block Grant funds are used to serve these individuals; a summary of practices for preventing substance abuse disorders among individuals who have mental illness and are at risk of having or acquiring a substance abuse disorder; a summary of evidence-based practices for treating individuals with co-occurring disorders and recommendations for implementing such practices; and a summary of improvements necessary to ensure that individuals with co-occurring disorders receive the services they need.

2001

Buck, JA., Teich, JL, Bae, J, Dilonardo, J. **Mental health and substance abuse services in ten state medicaid programs.** Administration and Policy in Mental Health 28(3): 181-192, 2001.

This article examines program data for 1993 on Medicaid mental health and substance abuse services and expenditures which were developed from Health Care Financing Administration research files for 10 states. These data show that mental health and substance abuse service users are 7 to 13% of Medicaid enrollees. The percentage of Medicaid enrollees accounted for by mental health and substance abuse users increases with age, reaching a fifth of the 45-64 age group. Across the 10 states, mental health and substance abuse spending represents 11% of total Medicaid expenditures. When their expenditures for non-mental health and non-substance abuse services are also considered, mental health and substance abuse services users account for 28% of total Medicaid expenditures (authors).

Conrad, KJ, Yagelka, JR, Matters, MD, Rich, AR, Williams, V, Buchanan, M. **Reliability and validity of a modified colorado symptom index in a national homeless sample.** Mental Health Services Research 28(4): 345-350, 2001.

This article examines the reliability and construct validity of a modified version of the Colorado Symptom Index (MCSI), a brief, self-report measure of psychological symptomatology, in the multi-site Collaborative Program to Prevent Homelessness. Eight projects in the program collected new data at baseline, six, and 12 months using a set of common measures as well as site-specific instruments. The pooled sample consisted of 1,381 persons in treatment for mental illness and/or substance abuse of which 84% had a history of homelessness. The MCSI scale was found to be a reliable and valid measure of psychological symptoms in this sample. The authors conclude that the MCSI performed similarly to longer, more widely used measures of psychological symptomatology and could be useful in other studies targeting adults with severe mental illness and/or substance use disorders who are homeless (authors).

Harrison, PA., Beebe, T J, Park, E. **The Adolescent Health Review: A brief, multidimensional screening instrument.** Journal of Adolescent Health 29(2): 131-139, 2001.

Purpose: To develop a brief, multidimensional screening instrument for adolescents that addresses psychosocial domains critical to adolescent preventive health care services. Methods: Secondary analyses were conducted on survey data obtained in 1995 from a school sample of 76,159 students in grades 9 and 12, as well as 893 adolescents from juvenile correctional facilities, 500 adolescents from chemical dependency treatment programs, and 575 adolescents from residential behavioral treatment programs. A comprehensive set of 300 survey items was used in a series of discriminate analyses to determine which items best distinguished males and females in each clinical sample from their counterparts in the school sample. Results: The item selection for the Adolescent Health Review was guided both by empirical analyses and clinical judgment. The final screen is comprised of 33 Demographic and clinical items that address a variety of psychosocial domains. The computerized, self-administered screen can be completed in about 3 minutes. The screen is scored automatically and produces an easy-to-read risk-assessment profile. Because screening items were drawn from a large epidemiologic survey, normative profiles are available for each age and gender sub-group. Conclusions: A brief, empirically derived screening instrument, designed to address a range of adolescent risks, offers an opportunity for information gathering that otherwise might not be incorporated into routine clinic visits.

McNamara C, Schumacher JE, Milby JB, Wallace D, Usdan S. **Pravalence of nonpsychotic mental disorders does not affect treatment outcome in a homeless cocaine-dependent sample.** Am J Drug Alcohol Abuse, 27(1):91-106, Feb 2001.

This study presents the prevalence and treatment outcome of DUAL diagnosed (psychoactive substance use disorders [PSUD] plus other nonpsychotic mental disorders) among a population of homeless persons participating in a behavior day treatment and contingency management drug abuse treatment program. Participants were 128 persons: 76% male, 23.4% female, 82.2% African American, 17.2% white. There were 46 (35.9%) PSUDs and 82 (64.1%) DUAL participants. Cocaine (96.9%) and alcohol disorders (57.8%) were more prevalent overall, and 60.2% of participants had two or more psychoactive substance use disorders. DUAL participants had significantly more alcohol disorders than PSUDs (64.4% vs 50.0%). The most prevalent mental disorders (other than substance use) for the total and DUAL samples were, respectively, mood (551.6% and 80.5%) and anxiety (35.9% and 56.1%), and 31.3% and 48.8% had more than two mental disorders. The DUAL group had more severe problems than the PSUD group at baseline in alcohol, medical condition, employment/support, and psychiatric status areas on the ASI. Both groups showed treatment improvements at 6-month follow-up with the DUAL group showing greater mean changes than the PSUD group in five of the seven ASI areas. These findings are discussed in terms of effect of dual diagnoses on treatment outcome and study limitations related to a retrospective design and select sample of nonpsychotic mental disorders.

Noell, JW, Ochs, LM. **Relationship of sexual orientation to substance use, suicidal ideation, suicide attempts, and other factors in a population of homeless adolescents.** Journal of Adolescent Health 29(1): 1-6, 2001.

The purpose of this study was to explore the relationship of sexual orientation and gender to four sets of factors: family history, incarceration, substance use, and depression and suicide, in a population of homeless adolescents. A sample of homeless adolescents was recruited in Portland, Oregon and assessed using semi-structured interviews at baseline, three months and six months. A total of 532 youths (216 females and 316 males) provided data on sexual orientation and other variables. Heterosexual and non-heterosexual youths were compared on all sets of factors, primarily using logistic regressions. Results

indicated that 44.9% of females identified as lesbian or bisexual, while only 13.9% of males identified as gay or bisexual. Gay, lesbian, bisexual, and "unsure" (GLBU) youths were less likely to have been in foster care or arrested, but were more likely to have spent time in a locked mental health treatment facility. More than one-third of all participants reported use of injection drugs. GLBU youths were more likely to have recently used amphetamines and to have injected drugs, however, gay-bisexual males were less likely to have recently used marijuana. GLBU status was associated with recent measures of depression and suicidal ideation, but not with lifetime measures. Associations of sexual orientation with several lifetime measures were different than with prospective measures, demonstrating the limitations of using lifetime measures rather than recent or prospective measures. This population of homeless adolescents appears to be higher in its high rate of injection drug use and the large proportion of females who identify as lesbian or bisexual than found in other studies. The high rates of depression and suicidal ideation, especially among GLBU youth, are of great concern (authors).

Opler, L, White, L, Caton, C, Dominguez, B, Hirshfield, S, Shrout, P. **Gender differences in the relationship of homelessness to symptom severity, substance abuse, and neuroleptic noncompliance in schizophrenia.** Journal of Nervous and Mental Disease 189(7): 449-456, 2001.

This study examined gender differences in the relationship of homelessness in schizophrenia to symptom severity, risk behaviors, and prognostic features. Homelessness for the entire sample was associated with greater severity of positive, activation, and autistic preoccupation symptoms, younger age at first hospitalization, and substance abuse. For men only, homelessness was associated with neuroleptic noncompliance. When neuroleptic noncompliance and substance abuse were statistically controlled, symptom severity was not different between the homeless and never homeless. Women, independent of residential status, had more severe negative, activation, and autistic preoccupation symptoms that were not associated with prognostic features or risk behaviors. For both men and women, substance abuse was associated with homelessness, but independent of residence, substance abuse was less severe in women. Additionally, it was less severe in homeless women than in never homeless men. Thus, symptom severity in homeless individuals with schizophrenia appears as an interaction of symptom profiles and risk behaviors that are gender specific. Although cross-sectional analyses cannot distinguish cause from effect, these findings suggest gender-specific routes to homelessness among indigent urban adults with schizophrenia (authors).

Schofield N, Quinn J, Haddock G, Barrowclough C. **Schizophrenia and substance misuse problems: A comparison between patients with and without significant carer contact.**

AIM: Many researchers and clinicians in the mental health field have given much attention over the last few years to patients with co-morbid problems of schizophrenia and substance use. This population is becoming a focus of attention for all service providers owing to the suggested increase in numbers of patients with these dual diagnoses and the observed negative effects on patients and costs to services. The advantages for providing family interventions in schizophrenia are now well established and increasingly these interventions are being evaluated for families of dual diagnosis patients. Many dually diagnosed patients do not, however, have a great deal of contact with a carer/relative. This paper looks at whether differences exist between patients with a dual diagnosis that have carer contact and those who do not have carer contact in terms of their illness history and type of substance use. For the purpose of this article 'carer' refers to an individual who is an informal carer or relative with whom the client has weekly contact of 10 h. Many of these carers provide the client with emotional, physical and material support. METHOD: The identification process for both'carer contact' and 'no carer contact' patients was conducted through the screening of the hospital's care programme approach (CPA) lists and through contact with care coordinators and consultants. Case notes of all patients identified were screened and information on

demographic data, duration of illness, admissions and substance use was collected. RESULTS: Results indicated that the 'no carer contact' group was older and had significantly more days in hospital at last admission. CONCLUSIONS: It is possible that as patients get older their contact with significant others decreases, i. e. loss of contact with key relatives is due to age rather than severity of substance use. Furthermore, patients' reduced contact results in them having longer stays in hospital possibly because they will not receive additional support when discharged.

Sciacca K, Dobbins KR. **Kentucky dual-diagnosis residence yields remarkable outcome.** Alcoh Drug Abus Wkly, 13(7):5, Feb 12, 2001.

Evaluates the outcome of the establishment of a dual-diagnosis residence for homeless women with mental illness and chemical dependency in Kentucky.

Sturm, R. **The costs of covering mental health and substance abuse care at the same level as medical care in private insurance plans: Testimony presented to the health insurance committee, national conference of insurance legislators on July 13, 2001 in Chicago.** RAND Health, 2001.

This testimony by a senior economist at RAND provides an analysis of the effect that incorporating substance abuse and mental health treatment into standard medical care plans through managed care organizations on costs to the organization itself.

Usdan, S, Schmacher, J, Milby, J, Wallace, D, McNamara, C, Michael, M. **Crack cocaine, alcohol, and other drug use patterns among homeless persons with other mental disorders.** American Journal of Drug and Alcohol Abuse 27(1): 107-120, 2001.

This study examined the co-occurrence of cocaine, alcohol, marijuana, and other drug use among treatment-seeking homeless persons to determine whether alcohol use predicted cocaine use differently than marijuana and other drugs predicted cocaine use. Results supported the assertion that cocaine use was strongly associated with extent of alcohol use and the association between cocaine and alcohol was stronger than the association between cocaine and other drug use, including marijuana. Participants with cocaine plus alcohol disorders were retained longer in treatment than disorders of cocaine only with no differences in abstinence outcome. The findings should drive further research into the use of alcohol as a trigger or predictor of cocaine use, the deleterious effects of the combined use of cocaine and alcohol, and specialized treatments for polysubstance users (authors).

Ziedonis, DM, Stern, R. **Dual recovery therapy for schizophrenia and substance abuse.** Psychiatric Annals 31(4): 255-265, 2001.

This article describes the unique problems of managing comorbid substance abuse and schizophrenia in the mental health setting and how to treat this dual-diagnosis population using a recovery-oriented perspective. Dual recovery therapy (DRT) is reviewed and discussed. DRT blends traditional mental health and addiction psychosocial treatments while adapting them to the stage of recovery. DRT can guide individual clinicians and integrated dual-diagnosis treatment programs. With dual recovery possible, patients can improve their lives with integrated treatment and can regain a sense of meaning and purpose (authors).

2000

Carey, KB, Purnine, DM, Maisto, SA, Carey, MP, Simons, JS. **Treating substance abuse in the context of severe and persistent mental illness: Clinician's perspectives.** Journal of Substance Abuse Treatment 19: 189-198, 2000.

In this article the authors report on four focus groups (N=12) that were conducted with clinicians who were nominated by their peers as experienced and/or expert in treating persons with comorbid substance use and psychiatric disorders. Discussion followed a four-part outline that included (a) general questions about training and experience with the population, (b) preferred treatment methods, (c) motivational issues, and (d) recommendations to the field. Their treatment approaches emphasized psychoeducation, a good therapeutic relationship, and the need to be flexible regarding methods and goals. Abstinence was the preferred goal among most clinicians; even so, they expressed a pragmatic flexibility and other views consistent with principles of harm reduction (authors).

Caston, CLM, Hasin, D, Shrout, PE, Opler, LA, Hirshfield, S, Dominguez, B, Felix, A. **Risk factors for homelessness among indigent urban adults with no history of psychotic illness: A case-control study.** American Journal of Public Health 90(2): 258-263, 2000.

This study identified risk factors for homelessness among indigent urban adults without dependent children and with no history of psychotic illness. The authors conducted a matched case-control study, stratified by sex, of 200 newly homeless men and women and 200 indigent men and women with no history of homelessness. Trained interviewers employed standardized research instruments to probe three domains of risk factors, symptom severity and substance use disorder, family support and functioning, and prior use of services. Significant interaction effects by sex were present for symptom severity, heroin use disorder, and prior service use. Greater numbers of the homeless of both sexes lacked a high school diploma and had less income from all sources, including from their families, than of the never homeless. Newly homeless men and women with no history of psychotic illness differed from their never-homeless counterparts in the three domains investigated, but socioeconomic factors were also important. (authors).

Center for Mental Health Services and Center for Substance Abuse Treatment. **Insights and inroads: Project highlights of the CMHS and CSAT collaborative demonstration program for homeless individuals.** Rockville, MD: Center for Mental Health Services and Center for Substance Abuse Treatment, 2000.

This program was designed to identify, evaluate, and disseminate information on successful approaches for addressing the treatment and service needs of people who are homeless with both serious mental illness and alcohol or other drug disorders. The results of the Demonstration Program are reported in a Compendium of documents that includes two report volumes and six individual project documents that contain site specific program manuals and evaluation results. Volume I of the Compendium describes the interventions and client populations of the six projects that participated in both phases of the program. Volume II of the Compendium presents highlights of the process, outcome, and cross-site evaluations (authors). A CD-Rom is included.

Center for Mental Health Services. **Projects for Assistance in Transition from Homelessness (PATH) 1998 performance data.** Rockville, MD: Center for Mental Health Services, 2000.

The Projects for Assistance in Transition from Homelessness (PATH) program was created under the McKinney Act. Using formula grants, the PATH program funds the 50 States, the District of Columbia, Puerto Rico, and four U.S. Territories to support service delivery to individuals with serious mental illnesses, as well as individuals with co-occurring substance use disorders, who are homeless or at risk of becoming homeless. This fact sheet describes PATH clients and providers, the services PATH offers, and the role of state mental health authorities in administering the program.

Drake, RE, Wallach, MA. **Dual Diagnosis: 15 years of progress.** Psychiatric Services 51(9): 1126-1129, 2000.

In this article, the findings support the development of integrated treatment programs that address both types of disorder. Drs. Drake and Wallach describe four perspectives on dual diagnosis - medical, moralistic, psychosocial risk, and phenomological. They argue that the emphasis on diagnosis and illness may have delayed the development of public policies and programs to address risks for substance abuse inhering in social and environmental settings, such as housing shortages and lack of employment opportunities(authors).

Herman, SE., Frank, KA., Mowbray, CT., Ribisl, KM. **Longitudinal effects of integrated treatment on alcohol use for persons with serious mental illness and substance use disorders.** Journal of Behavioral Health Services and Research 27(3): 286-302, 2000.

The authors used a randomized experimental design to assign participants to an integrated mental health and substance use treatment program or to standard hospital treatment. Hospital treatment effects were estimated on days of alcohol use for persons with serious mental illness and substance use disorders. The integrated program had a significant effect on the rate of alcohol use after discharge, reducing the rate of use by 54% (authors).

Jainchill N, Hawke J, Yagelka J. **Gender, psychopathology, and patterns of homelessness among clients in shelter-based TCs.** Am J Drug Alcohol Abuse, 26(4):553-67, Nov 2000.

Substance abuse and severe mental illness are factors that have been linked to homelessness, and the rates of mental illness have been reported to be higher among homeless women than men. Only recently have investigators begun to examine the prevalence of abuse among the homeless population and its relationship to indicators of psychopathology. This study builds on the existing literature and examines the relationship among psychiatric disturbance, abusive experiences, and homelessness among adult men and women admitted to shelter-based therapeutic community (TC) drug treatment programs. RESULTS: The sample presents with extensive psychopathology and a history of physical and sexual abuse. Gender differences indicate that, except for antisocial personality, females yield higher rates on measures of both psychiatric disturbance and abuse. The relationship between psychopathology and abuse also appears to be much stronger for females than for males. However, the relationship between abuse and adult homelessness appears to be similar for men and women. The gender differences in the relationship between histories of abuse and manifestations of psychiatric disturbance support a hypothesis that has been proposed

elsewhere. Females internalize the trauma associated with abusive experience, while male externalize it. The findings suggest that, although there may be a need for gender specific targeted interventions, treatment providers must also recognize that the impact of abuse seems to transcend gender within this population.

Lam, JA, Rosenheck, RA. **Correlates of improvement in quality of life among homeless persons with serious mental illness.** Psychiatric Services 51(1): 116-118, 2000.

Longitudinal data from 4,331 homeless mentally ill clients at 18 sites participating in the Access to Community Care and Effective Services and Supports (ACCESS) program were used to assess participants' quality of life over a one-year period. At baseline, higher quality of life was associated with less severe depressive and psychotic symptoms, less use of alcohol and drugs, and more social support. At 12 months, improved quality of life was associated with decreased psychotic and depressive symptoms, reduced substance abuse, fewer days or homelessness, and increased social support, income, employment, and service use (authors).

Mark, TL, Coffey, RM, King, E, Harwood, H, McKusick, D, Genuardi, J, Dilonardo, J, Buck, JA. **Spending on mental health and substance abuse treatment 1987-1997.** Health Affairs 19(4): 108-120, 2000.

This article is the result of an ongoing effort to track spending on mental health and substance abuse (MH/SA) treatment nationwide. Spending for MH/SA treatment was $85.3 billion in 1997: $73.4 billion for mental illness and $11.9 billion for substance abuse. MH/SA spending growth averaged 6.8% a year between 1987 and 1997, while national health expenditures grew by 8.2%.

Milby JB, Schumacher JE, McNamara C, et al. **Initiating abstinence in cocaine abusing dually diagnosed homeless persons.** Drug Alcohol Depend, 60(1):55-67, July 2000.

This study measured effectiveness of behavioral day treatment plus abstinence contingent housing and work therapy (DT+) versus behavioral day treatment alone (DT). A randomized controlled trial assessed participants at baseline, 2 months, and 6 months. Participants (n=110) met criteria for cocaine abuse or dependence, nonpsychotic mental disorders, and homelessness. DT+ achieved greater abstinence at 2 and 6 months and more days housed at 6 months than DT. Effectiveness of DT+ was demonstrated, with greatest impacts on abstinence outcomes. Results replicated earlier work demonstrating effectiveness of behavioral day treatment and contingency management as an effective combination for cocaine abusing homeless persons.

Primm, AB, Gomez, MB, Tzolova-Iontchev, I, Perry, W, Thi Vu, H, and Crum, RM. **Severely mentally ill patients with and without substance use disorders: Characteristics associated with treatment attrition.** Community Mental Health Journal 36(3): 235-245, 2000.

This article aims to describe characteristics associated with attrition for patients in community mental health treatment with chronic mental illness with and without substance use disorders. Baseline assessments included sympton severity, treatment satisfaction, social support, and a structured diagnositc interview. Treatment attrition was assessed at six months. At six months, 36% of the dual diagnosis group, and 61% of the mental illness alon group were lost to follow-up. Attrition in the dually diagnosed

group tended to be associated with less satisfaction with treatment, and higher mean sympton scores. This type of investigation should aid in patient care and evaluation of treatment programs for persons with severe mental illness and co-occurring substance use disorders (author).

Ries RK, Russo J, Wingerson D, Snowden M, Comtois KA, Srebnik D, Roy-Byrne P. **Shorter hospital stays and more rapid improvement among patients with schizophrenia and substance disorders.** Psychiatr Services 51(2): 210-215, Feb 2000.

OBJECTIVE: Length of stay and treatment response of inpatients with acute schizophrenia were examined to determine whether differences existed between those with and without comorbid substance-related problems. METHODS: The sample comprised 608 patients with a diagnosis of schizophrenia or schizoaffective disorder treated on hospital units with integrated dual diagnosis treatment. They were rated on admission and discharge by a psychiatrist using a structured clinical instrument. Patients with no substance-related problems were compared with those with moderate to severe problems using t tests, chi square tests, and analysis of variance. RESULTS: When analyses controlled for age, gender, and other clinical variables, dually diagnosed patients were found to have improved markedly faster compared with patients without a dual diagnosis. Their hospital stays were 30 percent shorter on both voluntary and involuntary units. They also showed somewhat greater symptomatic improvement and no increase in 18-month readmission rates. On admission the dual diagnosis group was more likely to be younger, male, and homeless and more likely to be a danger to self and others. Severity of psychosis was the same at admission for the two groups, but the dually diagnosed patients were rated as less psychotic at discharge. CONCLUSIONS: Dually diagnosed patients with schizophrenia appear to stabilize faster during acute hospitalization than those without a dual diagnosis. The authors hypothesize that substance abuse may temporarily amplify symptoms or that these patients may have a higher prevalence of better-prognosis schizophrenia. The availability of integrated dual-focus inpatient treatment and a well-developed outpatient system may also have helped these patients recover more rapidly.

Sacks, S. **Co-occurring mental and substance use disorders: Promising approaches and research issues.** Substance Use and Misuse 35(12-14):2061-2093, 2000.

This paper surveys the mental health and drug user treatment literature, identifying promising approaches and research issues in the treatment of co-occurring mental illness and substance use disorders. The prevalence and classification of co-occurring disorders are briefly reviewed, and selected treatment models currently in use are described. Three models are cited as representing particularly promising approaches - comprehensive integrated treatment, assertive community treatment, and the modified therapeutic community and best practices are summarized. This paper proposes a research agenda focused on relevant emerging treatment issues.

Sleegers, J. **Similarities and differences in homelessness in amsterdam and New York City.** Psychiatric Services 51(1): 100-104, 2000.

Differences and similarities in homelessness in Amsterdam and New York City were examined, particularly in regard to persons most at risk for homelessness--those with mental illness and with substance abuse problems. Direct comparisons of the results of American and Dutch studies on homelessness are impossible, mainly because the estimates are uncertain. Because of the Dutch welfare system, Amsterdam has a smaller proportion of homeless people than New York City, although more people are homeless in Amsterdam today than 15 years ago. Neither a lack of affordable housing or

sufficient income nor unemployment has been a direct cause of the increase of homelessness. As in New York City, many of the homeless in Amsterdam are mentally ill or have substance use disorders. The increase in the number of homeless people in Amsterdam consists largely of mentally ill people who would have been admitted to a mental hospital 20 years ago and of older, long-term heroin abusers who can no longer live independently. Thus, institutional factors such as fragmentation of services and lack of community programs for difficult-to- serve people are a likely explanation for the growing number of homeless people in Amsterdam. (author).

Swartz, JA, Lurigio, AJ, Goldstein, P. **Severe mental illness and substance use disorders among former supplemental security income beneficiaries for drug addiction and alcoholism.** Archives of General Psychiatry 57(7): 701-707, 2000.

This article examines whether recently enacted federal legislation targeted at curbing abuses of cash benefits for former Supplemental Security Income beneficiaries for drug addiction and/or alcoholism (DA&A) may be creating a residual population that is to seriously impaired to work owing to psychiatric and substance use disorders. Data were derived from one-year follow-up interviews of 204 randomly selected DA&A beneficiaries in Chicago who were initially interviewed between January and March 1997, immediately following their termination in the Supplemental Security Income DA&A program. Twenty-six percent had a past-year severe mental illness while 34% met the DSM-III-R criteria for drug dependence. Illegal drug use was also prevalent with about 50% of the sample testing positive for marijuana, cocaine, or opiates. Compared with those working and earning at least $500 a month, unemployed or underemployed subjects who had lost all federal benefits had a much greater likelihood of being dependent on drugs and of having two or more comorbid psychiatric disorders. The authors state that it is increasingly difficult to help those who have lost DA&A benefits and who continue to be unemployed or underemployed make the transition from government assistance to sustained employment.

Zweben JE. **Severely and persistently mentally ill substance abusers: Clinical and policy issues.** J Psychoactive Drugs 32(4): 383-389, Oct-Dec 2000.

Communities that are struggling to provide effective treatment for the challenging population of severely mentally ill clients who use alcohol and drugs have a growing research base on which to make policy decisions. Integrating outpatient treatment for mental health and addictive disorders appears to be more effective than treatment in two separate systems. Integrated treatment at a single site allows for individualizing treatment priorities without fragmenting care. Harm reduction approaches provide a low threshold entry, which can be followed by interventions to enhance motivation. Managing patient benefits to discourage drug use reduces the likelihood of their becoming homeless, hospitalized or incarcerated. Inadequate treatment capacity plays a large role in the growing number of disturbed clients who end up in the criminal justice system. Effective community treatment requires vigorous collaboration between care providers. Ultimately, professional training programs need to produce clinicians who are competent and comfortable addressing alcohol and other drug use to implement effective treatment systems

1999

French, M.T., Sacks, S., DeLeon, G., Staines, G., McKendrick, K. **Modified therapeutic community for mentally ill chemical abusers: Outcomes and cost.** Eval Health Prof, 22(1):60-85, 1999.

Several studies have established that the personal and social consequences of substance abuse are extensive and costly. These consequences are frequently compounded by mental illness. Although interventions that target mentally ill chemical abusers (MICAs) present several challenges, the potential benefits of successful interventions are significant. This article presents outcomes and costs of a modified therapeutic community (TC) intervention for homeless MICAs. Outcomes at follow-up are compared with those for a control group of homeless MICAs receiving standard services in a "treatment-as-usual" (TAU) condition. Annual economic costs for the modified TC and the average weekly cost of treating a single client are estimated. Treatment and other health service costs at 12 months postbaseline are compared for modified TC and TAU clients. The results of this study indicate that suitably modified, the TC approach is an effective treatment alternative for homeless MICAs with the potential to be highly cost-effective relative to standard services.

Hoff, R.A., Rosenheck, R.A. **The cost of treating substance abuse patients with and without comorbid psychiatric sisorders**. Psych Serv, 50(10):1309-15, 1999.

In this article, data from a national sample of patients with a primary diagnosis of a substance use disorder were analyzed to examine whether having a comorbid psychiatric diagnosis was associated with increased costs of health services over a six-year period and whether dually diagnosed patients used particular types of services more frequently. A national sample of substance abuse patients being treated in Veterans Affairs (VA) facilities were classified into two groups -- those with a dual diagnosis (N=3,069) and those with a single diagnosis of substance use disorder (n=9,538). Administrative data was used to track VA health care utilization and costs between 1991 and 1996. Dual diagnosis was associated with a significantly increased cost of care, which was primarily explained by increased utilization of outpatient psychiatric and substance abuse services. Costs for both groups decreased over time, but they decreased faster among dually diagnosed patients. The authors conclude that the increased costs may simply reflect the greater severity of illness among dually diagnosed patients, but it may also indicate fragmented and inefficient service delivery.

Kasprow WJ, Rosenheck R, Frisman, DiLella D. **Residential treatment for dually diagnosed homeless veterans: A comparison of program types**. Am J Addict, 8(1):34-43, Winter 1999.

This study compared two types of residential programs that treat dually diagnosed homeless veterans. Programs specializing in the treatment of substance abuse disorders and substance abuse problems within the same setting (DDX) were compared on: (1) program characteristics; clients' perceived environment; and(3) outcomes of treatment. The study was based on surveys and discharge reports from residential treatment facilities that were under contract to the Department of Veterans Affairs Health Care for the Homeless Veterans program, a national outreach and case management program operating at 71 sites across the nation. Program characteristics surveys were completed by program administrators, perceived environment surveys were completed by veterans in treatment, and discharge reports were completed by VA case managers. DDX programs were characterized by lower expectations for functioning, more acceptance of problem behavior, and more accommodation for choice and privacy, relative to SA

programs after adjusting for baseline differences. Dually diagnosed veterans in DDX programs perceived these programs as less controlling than SA programs, but also having lower involvement and less practical and personal problem orientations. At discharge, a lower percentage of veterans from DDX than SA programs were discharged to community housing rather than to further institutional treatment. Program effects were not different for psychotic and non-psychotic veterans. Although differences were modest, integration of substance abuse and psychiatric treatment may promote a faster return to community living for dually diagnosed homeless veterans. Such integration did not differentially benefit dually diagnosed veterans whose psychiatric problems included a psychotic disorder.

Leal, D., Galanter, M., Dermatis, H., Westreich, L. **Correlates of protracted homelessness in a sample of dually diagnosed psychiatric inpatients.** J Subst Abus Treatm, 16(2):143-7, 1999.

In this article, the authors assessed sociodemographic, drug use, and diagnostic correlates of protracted homelessness in a sample of 147 dually diagnosed patients who required admission to a hospital. When 58 patients with protracted homelessness, defined as continued undomiciled status for over a year, were compared with 74 patients without protracted homelessness, significant differences were found with regards to diagnosis, employment status, criminality, Brief Psychiatric Rating Scale score on admission, and history of injection drug use. No significant relationships were found between protracted homelessness and demographics or chronicity of mental illness.

Lundy JW. **The burden of comorbidity among the homeless at a drop-in clinic.** J Amer Acad Phys Assist, 12(4):32-4 ff, April 1999.

This study was a retrospective chart review based on 174 patients seen during their initial visit. Information was obtained from data reported by each patient during the history and physical exam. Patients most likely to use the clinic were predominantly male, between the ages of 20 and 39, African-American, and living in an emergency shelter. Sixty-eight (39%) patients had some insurance coverage. Comorbidity was significant with 34 (20%) patients reporting all three types of pathology: physical, mental, and substance abuse. Homeless patients reporting substance abuse were likely to report the coexistence of a medical condition (54%) or a mental health problem (27%). Patients who reported problems of depression, anxiety, or suicidal ideation or who heard voices had a significant concomitant occurrence of all three types of clinical pathology. Patients living in an emergency shelter or on the street (as opposed to living with family or friends) were at high risk of medical problems, mental health problems and substance abuse. The prevalence of a medical problem, mental health problem, and substance abuse among the homeless is significant. Homeless patients may be at high risk of two or more comorbid conditions if they live in an emergency shelter or on the street, have a substance abuse problem, or have a mental health problem. Targeted clinical services and preventative medicine programs would be beneficial to these patients.

RachBeisel, J., Scott, J., Dixon, L. **Co-occurring severe mental illness and substance use disorders: A review of recent research.** Psych Serv, 50(11):1427-34, 1999.

In this article, the authors review research studies concerning co-occurring severe mental illness and substance use disorders from the past six years that have contributed to the knowledge about effective assessment, diagnosis, course of illness, and treatment approaches. Research on special populations, including women, persons with HIV/AIDS, and violent patients is highlighted (authors).

Reilly EC, Ashe BL, Duckworth KS. **Tailoring and individualizing housing programs for homeless persons with chronic mental illness.** Harv Rev Psych, 7(3):166-71, Sept-Oct 1999.

Tsemberis, S., Asmussen, S**. From streets to homes: The Pathways to Housing Consumer Preference Supported Housing Model.** Alcoh Treatm Quart, 17(1/2):113-31, 1999.

The homelessness prevention program presented in this paper, the Consumer Supported Housing Model (CPSH), was developed by Pathways to Housing, Inc., a private non-profit social services organization in New York City. The agency concentrates on individuals rejected by other housing programs due to refusal to participate in psychiatric treatment, active substance abuse, histories of violence or incarceration, and other behavioral personality disorders. This paper describes the essential components of the CPSH model: the program's conceptual framework and logic model; a description of the concept mapping process that was used to obtain stakeholder perceptions; the logic model which resulted; a discussion of program effectiveness; and the lessons learned from the past five years of operation.

Utilization of mental health and substance abuse services among homeless adults in Los Angeles. Med Care, 37(3):306-17, 1999.

This article examines utilization and predictors of mental health and substance abuse treatment among a community-based probability sample of homeless adults. The data analyzed were collected through interviews with 1,563 homeless individuals. Two-thirds of these homeless adults met criteria for chronic substance dependence, whereas 22% met criteria for chronic mental illness, with substantial overlap between those two disorders: 77% of those with chronic mental illness were also chronic substance abusers. Only one-fifth of each of those two groups reported receiving treatment within the last 60 days. Mental health service utilization was predicted largely by factors related to need (e.g., diagnosis, acknowledgement of mental health problem), whereas substance abuse service utilization was predicted my myriad additional factors.

Watkins KE, Shaner A, Sullivan G. **The role of gender engaging the dually diagnosed in treatment.** Comm Ment Health J, 35(2):115-26, April 1999.

Individuals with both serious mental illness and substance abuse are particularly difficult to engage in treatment. Given known gender differences in both substance abuse and schizophrenia, we examined the impact of gender on treatment engagement. Qualitative interviews with ten males and eleven females focused on how the client perceived the engagement process, and what obstacles they faced. While both males and females are difficult to engage, the interviews suggest that they experience the process differently and that they face different obstacles. We discuss the implication for service providers.

1998

Brunette M, Drake RE. **Gender differences in homeless persons with schizophrenia and substance abuse.** Community Ment Health J, 34(6):627-42, Dec 1998.

The purpose of this study was to test the generalizability of previous research on gender differences between men and women with co-occurring schizophrenia and substance abuse. One hundred eight patients with schizophrenia or schizo-affective disorder were interviewed for information regarding substance use, social functioning and support, comorbid disorders, victimization, medical illness, and legal trouble. Women had more children and were more socially connected than men. Women also had higher rates of sexual and physical victimization, anxiety, depression and medical illness. Homeless women with dual disorders, like women with substance use disorders in the general population, have distinct characteristics, vulnerabilities, and treatment needs. In addition to comprehensive treatment of psychiatric and substance use disorders, gender-specific services should be developed, including prevention and treatment of victimization and related problems as well as help with accessing medical services.

Drake, R.E., McFadden, C.M., Mueser, K.T., McHugo, G.J., Bond, G.R**. Review of integrated mental health and substance abuse treatment for patients with dual disorders**. Schizo Bull, 24(4):589-608, 1998.

This article reviews 36 research studies on the effectiveness of integrated treatments for dually diagnosed patients. Studies of adding dual-disorders groups to traditional services, studies of intensive integrated treatments in controlled settings, and studies of demonstration projects have yielded disappointing results. But 10 recent studies of comprehensive, integrated outpatient treatment programs provide encouraging evidence of programs' potential to engage dually-diagnosed patients in services and help them reduce substance abuse and attain remission. Outcome related to hospital use and psychiatric symptoms remain less consistent. Several program features appear to be associated with effectiveness: assertive outreach, case management, and a longitudinal, stage-wise, motivational approach to substance abuse treatment.

Drake R, McHugo GJ, Clark RE, Teague GB, Xie H, Miles K, Ackerson TH. **Assertive community treatment for patients with co-occurring severe mental illness and substance use disorder: A clinical trial.** Amer J Orthopsych, 68(2):201-15, 1998.

In this article, integrated mental health and substance abuse treatment within an assertive community treatment (ACT) approach was compared to that within a standard case management approach for 223 patients with dual disorders over three years. ACT showed greater improvements on some measures of substance abuse and quality of life, but the groups were equivalent on most other measures. These included stable community days, hospital days psychiatric symptoms, and remission of substance use disorder. The authors conclude that patients who received treatment through ACT experienced only slightly greater improvements, and these statistical differences did not translate into differences in rates of stable remission of substance use disorder.

El-Mallakh P. **Treatment models for clients with co-occurring addictive and mental disorders.** Arch Psych Nurs, 12(2):71-80, 1998.

Recent epidemiological studies conducted by the National Comorbidity Survey have indicated that up to 51% of individuals with a serious mental illness are also dependent on or addicted to illicit drugs. However, only 50% of these clients with co-occurring addictive and mental disorders receive treatment that addresses both issues. The author provides a historical overview of treatment philosophies and approaches, describes current treatment models, and reports on outcome data that describe the efficacy of current treatment. Recommendations are made for nurses to incorporate effective treatment models into nursing practice.

Humphreys, K., Rosenheck, R. **Treatment involvement and outcomes for four subtypes of homeless veterans.** Amer J Orthopsych, 68(2):685-94, 1998.

This article presents the results of a longitudinal study that examined treatment services and outcomes in a nationwide sample of 565 homeless veterans who were classified as alcoholic, psychiatrically impaired, multi-problem, or best-functioning. All four groups experienced some improvement in their primary problem area, in employment status, and in residential quality at eight-month follow-up. There were significant differences, however, in degree of improvement across groups. Implications for the design of homeless programs and policies are discussed.

Kasprow, W.J., Rosenheck, R. **Substance use and psychiatric problems of homeless Native American veterans.** Psych Serv, 49(3):345-50, 1998.

This study estimated the proportion and representation of Native Americans among homeless veterans and compared their psychiatric and substance use problems with those of other ethnic groups of homeless veterans. The study was based on data from the Department of Veterans Affairs' Health Care for the Homeless Veterans program, which operates in 71 sites across the country. The authors found that Native Americans are overrepresented in the homeless veteran population. They have more severe alcohol problems than other minority groups but somewhat fewer drug dependence and psychiatric problems.

Mierlak D, Galanter M, Spivack N, Dermatis H, Jurewicz E, De Leon G. **Modified therapeutic community treatment for homeless dually diagnosed men. Who completes treatment?** J Subst Abuse Treat, 15(2):117-21, March 1998.

We studied a modified therapeutic community designed for the treatment of patients with combined substance abuse and psychiatric disorders. This model has been applied on a limited basis in clinical practice, and little is known about the characteristics of patients who are likely to complete the prescribed stay in such a program. We present characteristics of 189 homeless dually diagnosed men who entered a shelter-based, modified therapeutic community with a prescribed 6-month stay. 34% of admissions completed the stay. These patients were more likely to have fewer inpatient psychiatric admissions and more job experience than those who did not complete their stay. Findings are discussed in terms of their similarities and differences to findings from traditional therapeutic communities for the singly diagnosed.

Nuttbrock, L., Rahav, M., Rivera, J., Ng-Mak, D., Link, B**. Outcomes of homeless mentally ill chemical abusers in community residences and a therapeutic community**. Psych Serv, 49(1):68-76, 1998.

The feasibility and effectiveness of treating homeless mentally ill chemical abusers in community residences compared with a therapeutic community were evaluated. A total of 694 homeless mentally ill chemical abusers were randomly referred to two community residences or a therapeutic community. All programs were enhanced to treat persons with dual diagnoses. Subjects' attrition, substance use, and psychopathology were measured at 2, 6, and 12 months. 42% of the 694 referred subjects were admitted to their assigned program and showed up for treatment, and 13% completed 12 months or more. Clients retained at both types of program showed reductions in substance use and psychopathology, but reductions were greater at the therapeutic community. Compared with subjects in the community residences, those in the therapeutic community were more likely to be drug-free, and showed greater improvement in psychiatric symptoms. Homeless mentally ill chemical abusers who are retained in community-based residential programs, especially in therapeutic communities, can be successfully treated.

O'Connell, D.F**. Dual disorders: Essentials for assessment and treatment.** Binghamton, NY: The Haworth Press, Inc., 1998.

The aim of this book is to be a professional resource for treating dual disorders. It is intended for the addictions counselor responsible for the care of such patients. The information and guidelines contained in it are fundamental to the sound treatment of patients with dual disorders. The guiding assumption of this book is that any addictions therapist, regardless of professional training and experience, can master the basic information and approaches needed to effectively manage the dually diagnosed patient.

Ridgely, M.S., Lambert, D., Goodman, A., Chichester, C.S., Ralph, R. **Interagency collaboration in services for people with co-occurring mental illness and substance use disorder.** Psych Serv, 49(2):236-8, 1998.

The authors describe a program in Maine designed to develop a collaborative, or communities of providers, who work together to offer coordinated mental health and substance abuse treatment and support. Surveys of provider agencies in one collaborative conducted one year and two years after the collaborative was established showed an increase in interagency referrals, joint assessments of clients, and jointly sponsored training and client services. The authors conclude that developing a collaborative of providers to serve clients with co-occurring disorders offers a cost-effective approach to maximizing current resources and improving the local delivery of services.

Rosenberg SD, Drake RE, Wolford GL, Mueser KT, Oxman TE, Vidaver RM, Carrieri KL, Luckoor R. **Dartmouth Assessment of Lifestyle Instrument (DALI): A substance use disorder screen for people with severe mental illness.** Am J Psych, 155(2):232-8, Feb 1998.

OBJECTIVE: Despite high rates of co-occurring substance use disorder in people with severe mental illness, substance use disorder is often undetected in acute-care psychiatric settings. Because underdetection is related to the failure of traditional screening instruments with this population, the authors developed a new screen for detection of substance use disorder in people with severe mental illness. METHOD: On the basis of criterion ("gold standard") diagnoses of substance use disorder for 247 patients admitted to a state hospital, the authors used logistic regression to select the best items from 10 current

screening instruments and constructed a new instrument. Validity of the new instrument was tested by comparing with other screens, on an independent group of 73 admitted patients. RESULTS: The new screening instrument, the Dartmouth Assessment of Lifestyle Instrument (DALI), is brief, is easy to use, and exhibits high classification accuracy for both alcohol and drug (cannabis and cocaine) use disorders. The DALI functioned significantly better than traditional instruments for both alcohol and drug use disorders. CONCLUSIONS: Initial findings suggest the DALI may be useful for detecting substance use disorder in acutely ill psychiatric patients. Further research is needed to validate the DALI in other settings and with other groups of psychiatric patients.

Sakai J, Kim M, Shore J, Hepfer M. **The risk of purified protein derivative positivity in homeless men with psychotic symptoms.** South Med J, 91(4):345-8, April 1998.

BACKGROUND: Homeless people with mental illness have relatively high rates of human immunodeficiency virus, comorbid antisocial personality disorder, and may be homeless more frequently and for greater lengths of time. All of these factors may increase the risk of tuberculosis. METHODS: Our study was done to ascertain if homeless men with psychotic disorders are at an increased risk for tuberculosis infection. One hundred fifty homeless men were interviewed and given purified protein derivatives (PPDs) at a downtown shelter in New Orleans, Louisiana, during a 3-month period. RESULTS: The findings show a strong relationship between psychotic disorders and positive PPDs, with a relative risk of 4.48. CONCLUSIONS: Homelessness and mental illness present barriers to seeking and completing treatment for medical illnesses such as tuberculosis. Use of services may be low even when available; therefore, homeless men with psychotic disorders may be serving as a reservoir for tuberculosis.

Stein, L.I., Santos, A.B**. Rural, dually diagnosed, and homeless populations**. In Stein, L.I., Santos, A.B., Assertive Community Treatment of Persons with Severe Mental Illness. New York, NY: W.W. Norton & Company, 111-30, 1998.

This chapter addresses four policy-relevant issues associated with the dissemination of Assertive Community Treatment (ACT) services. Specifically discussed are key modifications and adaptations necessary to implement effective ACT programs in rural settings; for homeless populations; to maximize employment opportunities; and to minimize the use of illicit drugs.

Winarski, J.T. **Implementing interventions for homeless individuals with co-occurring mental health and substance use disorders: A PATH technical assistance package.** Rockville, MD: Center for Mental Health Services, 1998.

This technical assistance report was prepared to make state-of-the-art research and program information available to front-line practitioners in local Projects for Assistance in Transition from Homelessness (PATH) programs. This report provides a select bibliography, presents information from field-tested models, draws upon the most current academic literature, and focuses on strategies for overcoming problems that are common to front-line practitioners. The report is divided into three major sections: (1) background information about the unique attributes of homeless individuals with co-occurring disorders;(2) a summary of service approaches and treatment principles associated with effective responses to the needs of the target population; and (3) strategies and interventions.

1997

Bebout, R.R., Drake, R.E., Xie, H., McHugo, G.J., Harris, M. **Housing status among formerly homeless dually diagnosed adults.** Psych Serv, 48(7):936-41, 1997.

This article describes a study that examined residential outcomes of homeless adults with severe mental illness and a substance use disorder over an 18-month period during which participants received integrated dual-diagnosis services and housing supports based on a continuum model. The authors used data from 122 participant interviews conducted at baseline, and at six-, 12-, and 18-month follow-ups that assessed housing status, residential history, substance abuse and progress toward recovery, psychiatric symptoms, and quality of life. Results indicated that 52% of participants achieved stable housing, and that most who did first entered staffed and supervised housing and then moved to independent arrangements by the end of the study. Stable housing was found to be associated with lower substance use, greater progress toward recovery, and high quality of life. The authors concluded that housing stability is strongly mediated by substance abuse and progress toward recovery, but that when provided with integrated dual-diagnosis treatment, formerly homeless persons with dual-diagnosis can gradually achieve stable housing.

Belcher, J.R**. Discharge Planning.** Delmar, NY: National Resource Center on Homelessness and Mental Illness, 1997.

This study examines factors that contribute to depressive symptoms, depression, co-occurring depression and substance abuse, and co-occurring depression and conduct problems among 602 runaway and homeless adolescents. The respondents were interviewed in shelters, drop-in centers, and directly on the streets in four Midwestern states (Missouri, Iowa, Nebraska, and Kansas). Results indicate that although family of origin factors contribute directly and indirectly to depression and comorbidity among runaway and homeless adolescents, experiences and behaviors when the adolescents are on their own also have powerful direct effects. The authors discuss the finding from a life course perspective examining mechanisms through which street experiences accentuate or amplify already high levels of psychological distress and behavioral problems among this population.

Drake RE, Yovetich NA, Bebout RR, Harris M, McHugo GJ. **Integrated treatment for dually diagnosed homeless adults**. J Nerv Ment Dis, 185(5):298-305, May 1997

This study examined the effects of integrating mental health, substance abuse, and housing interventions for homeless persons with co-occurring severe mental illness and substance use disorder. With the use of a quasi-experimental design, integrated treatment was compared with standard treatment for 217 homeless, dually diagnosed adults over an 18-month period. The integrated treatment group had fewer institutional days and more days in stable housing, made more progress toward recovery from substance abuse, and showed greater improvement of alcohol use disorders than the standard treatment group. Abuse of drugs other than alcohol (primarily cocaine) improved similarly for both groups. Secondary outcomes, such as psychiatric symptoms, functional status, and quality of life, also improved for both groups, with minimal group differences favoring integrated treatment.

Frisman LK, Rosenheck R. **The relationship of public support payments to substance abuse among homeless veterans with mental illness.** Psychiatr Serv, 48(6):792-5, June 1997.

OBJECTIVE: A suspicion that disability payments may exacerbate substance use among persons with chemical addictions recently led Congress to limit federal disability entitlements of applicants whose disability status is related to substance abuse, even if they have a serious mental disorder. This study explored the relationship between receipt of disability payments and substance use among homeless mentally ill veterans. METHODS: The sample included 2,474 homeless veterans with a diagnosis of schizophrenia and a substance abuse or dependence disorder who were assessed in a community outreach program sponsored by the Dept. of Veterans Affairs. RESULTS: Receipt of disability payments showed no significant relationship to the number of days of substance use a month, even among frequent users of alcohol and drugs. CONCLUSIONS: Findings about substance use among homeless veterans with serious mental disorders provide no support for the assertion that disability payments exacerbate substance use.

Kaplan M. **New trends in dual diagnosis.** Salem, OR: Oregon Office of Mental Health Services, 1997.

This summarizes recent findings in the field of dual diagnosis. Topics discussed are co-morbidity, prevalence rates, biogenetic research, dual diagnosis, innovative treatment, and gaps in service.

Meisler S, Blankertz L, Santos A, McKay C. **Impact of assertive community treatment on homeless persons with co-occurring severe psychiatric and substance use disorders.** Comm Ment Health J, 33(2):113-22, 1997.

This study evaluated an integrated assertive community treatment program for homeless persons with serious mental illness and substance use disorders. High rates of retention in treatment, housing stability, and community tenure were attained. All but the most severe substance users appeared to gain benefits. While the intervention appears to be an effective means of retaining services and monitoring such difficult to treat and costly populations, it did not yield high rates of abstinence and social benefits in severe users.

Messina N, Wish E, Nemes S. **The efficacy of therapeutic community treatment for substance abusers with co-occurring antisocial personality disorder.** College Park, MD: University of Maryland, College Park, Center for Substance Abuse Research, 1997.

This paper compared the treatment outcomes of 338 substance abusers with and without Antisocial Personality Disorder (APD) assigned to two therapeutic community treatment facilities differing primarily in the length of inpatient treatment. Results indicated that clients with APD were as likely to complete treatment as other clients. If APD clients completed treatment, they exhibited the same patterns of reduced drug use and recidivism as non-APD. The type of treatment program attended was unrelated to any of the outcome variables. The results suggest that substance abuse abusers diagnosed with APD can benefit from treatment in a therapeutic community. Reasons why these findings differ from prior research are discussed.

Mowbray CT, Ribisl KM, Solomon M, Luke DA, Kewson TP. **Characteristics of dual diagnosis patients admitted to an urban, public psychiatric hospital: an examination of individual, social, and community domains.** Amer J Drug Alcoh Abus, 23(2):309-26, 1997.

This study provides descriptive data on a large, diverse sample of dually diagnosed patients from an urban psychiatric inpatient setting, utilizing a comprehensive array of clinical, social, and community functioning measures. Over a one-year period, all persons admitted to a public psychiatric hospital with a DSM-III-R psychiatric diagnosis and a positive screen for substance abuse problems (n=486) were interviewed to

assess community and social functioning, alcohol and drug use, psychiatric problems, and service histories. The majority of participants were found to have serious economic and employment problems, undesirable living arrangements, limited or conflictive family or social relationships, and some record of arrest. They also demonstrated problem areas that require treatment including psychiatric, alcohol and drug abuse, employment, family/social, legal, and medical. The study results document the extreme heterogeneity in the dually diagnosed as well as their multiple treatment needs.

Nuttbrock, L.H., Ng-Mak, D.S., Rahav, M., Rivera, J.J**. Pre- and post-admission attrition of homeless, mentally ill chemical abusers referred to residential treatment programs.** Addiction, 92(10):1305-16, 1997.

This article assessed the magnitude and psychopathologic predictors of attrition among homeless, mentally ill chemical abusers (MICAs) referred to residential treatment programs in New York City. Pre- and post-admission rates were monitored for an initial pool of 694 homeless MICAs randomly referred to a therapeutic community (TC) or a community residence. From this pool, 22% were rejected for admission, 36% failed to show up for treatment, and 31% dropped out of treatment in the first 12 months. Those with severe levels of psychotic ideation, depressive symptoms, and hostility were admitted more frequently and remained in treatment longer at a TC, a high demand approach. The authors conclude that clinicians should consider the TC as a viable treatment option for MICAs.

Ries RK, Comtois KA. **Illness severity and treatment services for dually diagnosed severely mentally ill outpatients.** Schizophr Bull, 23(2):239-46, 1997.

This study of a frequently endorsed, but untested, model of outpatient treatment for persons with coexisting severe mental illness and substance use disorders assessed how the amount of treatment services delivered was related to an individual's global severity of illness, whether different modes of treatment were related to different aspects of illness, how noncompliance with treatment was related to the severity of illness and amount of services delivered, and how the diagnosis of schizophrenia/schizoaffective influenced these issues. Participants with high total severity of illness (TSI) received about twice the number of appointments (20.7 vs. 12.3) per month as those with low TSI scores. Higher TSI was also related to a DSM-IV diagnosis of schizophrenia/schizoaffective, being in a lower "phase" of treatment, representative payee benefit management, homelessness, and more hospitalizations. Participants with higher psychiatric symptom severity received significantly more case management and medication services, but not group therapy or day treatment. Severity of substance use condition was significantly related only to case management. This model of treatment was found to be successful in delivering higher levels of treatment services to those needing them.

Ries RK, Comtois KA. **Managing disability benefits as part of treatment for persons with severe mental illness and comorbid drug/alcohol disorders. A comparative study of payee and non-payee participants.** Am J Addict, 6(4):330-8, 1997.

The objective of this pilot study is to describe the use of a Social Security representative payee program as a clinical intervention integrated into long-term, dual-disorder treatment of severely mentally ill outpatients with comorbid drug/alcohol disorders. Compared with non-payees, patients selected to be payee participants were more likely to be male, have a diagnosis of schizophrenia, have a history of high inpatient utilization, and have higher current ratings of psychiatric symptoms, substance use, and functional disability. Despite these higher severity ratings, which usually predict poor outpatient compliance and higher rate of adverse outcomes, the payee participants attended about twice the number of outpatient service sessions as non-payees and were no more likely to be currently homeless, hospitalized, or incarcerated. The payee intervention is described, and ethical and research issues are discussed.

Rosenberg SD, Drake RE, Mueser K. **New directions for treatment research on sequelae of sexual abuse in persons with severe mental illness.** Community Ment Health J, 32(4):387-400, August 1996. Comment in: Comm Ment Health J, 33(4):371, Aug 1997.

Sexual abuse in childhood is increasingly recognized as an important etiologic component in a number of psychiatric disorders. One-quarter to one-third of all female children suffer sexual abuse before their eighteenth birthday, and at least one half of women with severe mental illness acknowledge such events. An even higher percentage of a particularly vulnerable group, dually diagnosed homeless women, appear to have a premorbid history of childhood victimization. In this paper, we review the emergent literature on childhood abuse, its sequelae and treatment; and discuss the implications of these data for the development of new approaches to trauma recovery in people with severe mental illness.

Rosenheck R, Lam J, Randolph F. **Impact of representative payees on substance use by homeless persons with serious mental illness.** Psychiatr Serv, 48(6):800-6, June 1997.

OBJECTIVE: Assignment of representative payees, third parties responsible for managing clients' funds, has been proposed to counter potential use of public support payments for abused substances by people with severe mental illness and substance use disorders. This study examines substance use outcomes in a sample of homeless persons with serious mental illness and substance use disorders, some of whom were assigned representative payees. METHODS: The subjects were participating in the Access to Community Care and Effective Services and Supports program, a federally funded demonstration program on integrating service systems. Clients were assessed at baseline and three months after case management services were initiated. Substance use among four client subgroups, two of which had payees and two of which did not, were analyzed. RESULTS: Clients in this sample (n=1,348) showed significant improvement on all measures of substance use over the first three months in the program. Those with payees showed no greater improvement in substance abuse than those without payees, although they did have fewer days of homelessness. CONCLUSIONS: This study failed to find evidence that merely adding external money management services to existing services improves substance abuse outcomes among clients who had dual diagnoses and were homeless. Structured behavioral interventions may be needed to produce additional clinical benefits.

Ustun B, Compton W, Mager D, Babor T, Baiyewu O, Chatterji S, Cottler L, Gogus A, Mavreas V, Peters L, Pull C, Saunders J, Smeets R, Stipec MR, Vrasti R, Hasin D, Room R, Van den Brink W,Regier D, Blaine J, Grant BF, Sartorius N. **WHO Study on the reliability and validity of the alcohol and drug use disorder instruments: Overview of methods and results**. Drug Alcoh Depend, 47(3):161-9, Sept 25, 1997.

The WHO Study on the reliability and validity of the alcohol and drug use disorder instruments in an international study which has taken place in centers in ten countries, aiming to test the reliability and validity of three diagnostic instruments for alcohol and drug use disorders: the Composite International Diagnostic Interview (CIDI), the Schedules for Clinical Assessment in Neuropsychiatry (SCAN) and a special version of the Alcohol Use Disorder and Associated Disabilities Interview schedule-alcohol/drug-revised (AUDADIS-ADR). The purpose of the reliability and validity (R&V) study is to further develop the alcohol and drug sections of these instruments so that a range of substance-related diagnoses can be made in a systematic, consistent, and reliable way. The study focuses on new criteria proposed in the tenth revision of the International Classification of Diseases (ICD-10) and the fourth revision of the diagnostic and statistical manual of mental disorders (DSM-IV) for dependence, harmful use and abuse categories for alcohol and psychoactive substance use disorders. A systematic study including a scientifically rigorous measure of reliability (i.e. 1 week test-retest reliability) and validity (i.e.

comparison between clinical and non-clinical measures) has been undertaken. Results have yielded useful information on reliability and validity of these instruments at diagnosis, criteria and question level. Overall the diagnostic concordance coefficients (kappa, kappa) were very good for dependence disorders (0.7-0.9), but were somewhat lower for the abuse and harmful use categories. The comparisons among instruments and independent clinical evaluations and debriefing interviews gave important information about possible sources of unreliability, and provided useful clues on the applicability and consistency of nosological concepts across cultures.

Valencia, E., Susser, E., Torres, J., Felix, A., Conover, S. **Critical time intervention for homeless mentally ill individuals in transition from shelter to community living**. In Breakey, W.R. and Thompson, J.W. (eds.), Mentally Ill and Homeless: Special Programs for Special Needs. Amsterdam, The Netherlands: Harwood Academic Publishers, 75-94, 1997.

Critical Time Intervention (CTI) was designed to prevent homelessness among individuals suffering from severe mental illnesses by stabilizing them in the period of transition to living in the community. CTI was tested in a randomized clinical trial between 1990 and 1994 at the Columbia-Presbyterian Mental Health Program for Homeless Individuals at the Fort Washington shelter for men in New York City. Preliminary analysis of the results indicated that the intervention is effective in reducing recurrent homelessness among mentally ill individuals. The authors conclude that if the final results confirm its effectiveness, CTI could be implemented in many programs for mentally ill individuals who are homeless.

Westreich L, Guedj P, Galanter M, Baird D. **Differences between men and women in dual-diagnosis treatment.** Am J Addict, 6(4):311-7, 1997.

The authors reviewed the charts of all women and a randomly selected sample of men over a 6-month period on two addiction treatment units at Bellevue Hospital Center in New York. The men were more likely to be admitted with schizophrenia and to have used substances of abuse other than alcohol, and the women were more likely to be admitted with affective disorders. Also, the women on the dual-diagnosis ward were more likely to be domiciled (i.e., not homeless), and the women on both units were significantly more likely to report having been crime victims. These findings suggest that dually diagnosed women need a substantially different treatment paradigm from men.

1996

Alexander, M.J**. Women with co-occurring addictive and mental disorders: An emerging profile of vulnerability.** Amer J Orthopsych, 66(1):61-70, 1996.

The heterogeneity of those with co-occurring addictive and mental disorders has only recently begun to be recognized, and treatment strategies for different segments of this population are still being developed. This article reviews the literature on alcohol and drug problems in women, and women with serious mental illness who are at high risk for substance abuse -- as well as other forms of abuse and deprivation -- due to poverty and victimization. The author contends that because public health and mental health agendas are threatened by budget cuts, it is critical that initial gains in acknowledging and addressing their needs not be lost or abandoned.

Brady S, Hiam CM, Saemann R, Humbert L, Flemming MZ, Dawkins-Brickhouse K. **Dual diagnosis: A treatment model for substance abuse and major mental illness.** Comm Ment Health J, 32(6):573-8, 1996.

The authors explain that treatment of dual diagnosis, co-occurring substance abuse and mental illness, calls for addressing two serious and often confounding problems. The potential utility of a transtheoretical treatment model is presented through the authors' experiences in working with inner-city individuals who have serious mental illness and substance abuse problems. Practical guidelines for dual diagnosis group therapy are discussed.

Carey KB. **Treatment of co-occurring substance abuse and major mental illness.** New Direct Ment Health Serv, 70:19-31, 1996.

This article proposes a model for the treatment of co-occurring substance abuse and major mental disorders that integrates empirically grounded strategies applicable to substance abuse problems into the context of outpatient mental health treatment. The model is organized around five therapeutic steps that can serve as guidelines for treatment planning. The model is also based on several underlying assumptions. First, the model assumes an outpatient mental health context in which clients have contact with a primary therapist or case manager. It also attempts to integrate substance abuse interventions and ongoing psychiatric treatment, and requires a combination of pharmacological treatment, psychosocial treatments, and supportive services. The final assumption of the model consists of adopting a longitudinal approach to treatment.

Center for Mental Health Services and Center for Substance Abuse Treatment. **CMHS/CSAT dual diagnosis demonstration grant annotated bibliography.** Rockville, MD: Center for Mental Health Services and Center for Substance Abuse Treatment, 1996.

This annotated bibliography concerning co-occurring mental health and substance use disorders was produced by the Center for Mental Health Services (CMHS) and the Center for Substance Abuse Treatment (CSAT). It contains approximately 56 journal articles, reports, books, papers, and manuals. Each citation includes a brief abstract. AVAILABLE FROM: The Better Homes Fund, 181 Wells Ave., Newton Center, MA 02159, (617) 964-3834.

Drake RE, Mueser KT (eds). **Dual diagnosis of major mental illness and substance abuse volume two: Recent research and clinical implications.** New Directions for Mental Health Services 70: 1996.

The chapters in this volume are intended to make current research findings available to all stakeholders in the system of care for people with co-occurring disorders. This volume is intended to highlight the clinical and service implications of the available research, and to help planners, administrators, clinicians, other providers, families, and consumers who are in the process of advocating for, developing, implementing, and participating in effective programs.

Fisher MS, and Bentley KJ. **Two group therapy models for clients with a dual diagnosis of substance abuse and personality disorder.** Psych Serv, 47(11):1244-50, 1996.

The relative effectiveness of two types of group therapy--the disease-and-recovery model and the cognitive-behavioral model--was examined in public inpatient and outpatient settings with consumers who had a dual diagnosis of personality disorder and substance use disorder. Outcomes in four areas of problem severity were measured, including alcohol use, drug use, social/family relations, and psychological

functioning. Results suggest that the severity of mental health consumers' substance abuse problems can be substantially decreased in several areas in an outpatient public setting. In inpatient setting, the use of either group therapy model was more effective in reducing problem severity than using no specific model.

Fischer EP, Owen RR, Cuffel BJ. **Substance abuse, community service use, and symptom severity of urban and rural residents with schizophrenia.** Psych Serv, 47(9):980-4, 1996.

This study examined the relationships of substance abuse, use of community-based services and symptom severity among rural and urban residents with schizophrenia in 6 months after discharge from short-term inpatient care. At baseline and 6-month follow-up, symptom severity of 139 subjects was assessed using the Brief Psychiatric Rating Scale (BPRS), and substance abuse status was determined using the Structured Interview for DSM-III-R. BPRS results on average indicated symptom improvement between baseline and follow-up, although symptoms worsened for 27% of the subjects. Symptoms of rural substance abusers who used no community services were worse at follow-up than those of any other subgroup. Nearly half of all subjects had less than monthly contact with community services. The greater likelihood of symptom worsening among rural residents was attributed to their less frequent use of community services. This reinforces the importance of involvement in community-based services for individuals with comorbid schizophrenia and substance use disorders. The promotion of service use by persons with dual diagnoses may be particularly critical to the well-being of rural residents with schizophrenia.

Goldfinger SM, Schutt RK, Seidman LJ, Turner WM, Penk WE, Tolomiczenko GS. **Self-report and observer measures of substance abuse among homeless mentally ill persons in the cross-section and over time**. J Nerv Ment Dis, 184:667-72, Nov 1996.

The comparability of self-report and observer measures of substance abuse among 118 homeless mentally ill persons was assessed using cross-sectional and longitudinal measures. Possible correlates of nondisclosure were identified from demographic variables and clinical indicators. Lifetime abuse reported at baseline was a sensitive predictor of subsequent abuse behavior in the project, but cross-sectional measures based only on self-report or observer ratings failed to identify many abusers. A total of 17% of the subjects never disclosed abuse that was observed during the project. The level of substance abuse is likely to be severely underestimated among homeless mentally ill persons when only one self-report measure is used at just one point in time. This problem can, however, largely be-overcome by incorporating information from observers and from multiple follow-ups or by focusing on lifetime rather than current abuse. We also conclude that underreporting may bias estimates of some correlates of substance abuse.

Greenbaum PE, Foster-Johnson L, Petrila A. **Co-occurring addictive and mental disorders among adolescents: Prevalence research and future directions.** Amer J Orthopsych, 66(1):52-60, 1996.

Recent epidemiological research documenting the pervasive co-occurrence of addictive and mental disorders has been concerned primarily with adults. This paper proposes the need for similar studies of adolescents, considers the special problems inherent in the assessment of co-occurrence in this age group, reviews evidence suggesting that the prevalence of co-occurring disorders in adolescents parallels that documented for adults, and delineates future research strategies.

Henry D, Keys C, Balcazar F, Jopp D. **Attitudes of community-living staff members toward persons with mental retardation, mental illness, and dual diagnosis.** Ment Retard, 34(6):367-79, 1996.

Attitudes of 340 staff members in 120 community living programs for people with mental retardation, mental illness, and dual diagnosis and a comparison sample of 152 community members were assessed using the Community Living Attitudes Scale, a measure of attitudes toward inclusion. Results showed that community agency supervisory and managerial staff held more favorable attitudes toward community living philosophy. Community support staff who worked with people who have mental retardation saw that population as less similar to other people than did the comparison sample and were less likely to endorse exclusion of persons with mental retardation than were those in the comparison sample. Retrospective analyses showed that training in inclusion philosophy was related to more inclusive, empowering attitudes among staff members.

Hurlburt MS, Hough RL, Wood PA. **Effects of substance abuse on housing stability of homeless mentally ill persons in supported housing.** Psychiatr Serv, 47:731-6, July 1996.

OBJECTIVE: The study examined two-year housing outcomes of homeless mentally ill clients who took part in an experimental investigation of supported housing. The relationships between housing outcomes and client characteristics, such as gender, psychiatric diagnosis, and substance use, were of primary interest. METHODS: A two-factor, longitudinal design was used. Homeless clients in San Diego County who were diagnosed as having chronic and severe mental illness were randomly assigned to four experimental conditions. Half of the clients were given better access to independent housing through Section 8 rent subsidy certificates. All clients received flexible case management, but half were provided more comprehensive case management services. The housing of each individual over a two-year period was classified in one of three categories: stable independent housing, stable housing in another setting in the community, or unstable housing. RESULTS: Clients with access to Section 8 housing certificates were much more likely to achieve independent housing than clients without access to Section 8 certificates, but no differences emerged across the two different levels of case management. Housing stability was strongly mediated by several covariates, especially the presence of problems with drugs or alcohol. CONCLUSIONS: Supported housing interventions can be very successful tools for stabilizing homeless mentally ill individuals in independent community settings. Advantages include the low level of restrictiveness of these settings and the preference of many clients for independent housing. However, the success of supported housing projects is likely to depend strongly on the specific characteristics of the population being served.

Jerrell JM, and Hu T. **Estimating the cost impact of three dual diagnosis treatment programs.** Eval Rev, 20(2):160-80, 1996.

The purpose of this article is to describe and illustrate a methodology for estimating the cost impact of three dual diagnosis treatment programs for severely mentally ill consumers. Dual diagnosis is the co-occurrence of severe and persistent mental illness (i.e., psychotic symptoms or extreme functional impairments) and alcohol and drug abuse. The problem of dual diagnosis is both harmful to those afflicted and costly to society.

Jerrell JM, Wilson JL. **The utility of dual diagnosis services for consumers from nonwhite ethnic groups.** Psych Serv, 47(11):1256-58, 1996.

The author describes a study where differences in psychosocial functioning, symptoms, service use, and costs for 40 nonwhite consumers of mental health services and 92 white consumers were compared at baseline and six months in a controlled clinical trial of three dual diagnosis interventions. At six months, nonwhite consumers had lower psychosocial functioning than white consumers as measured by self-report and clinicians' ratings. Nonwhite consumers received significantly less supportive treatment than white consumers. Qualitative data from staff interviews indicated that nonwhite consumers had inadequate community and family supports due to a variety of problems. Although the nonwhite consumers had outcomes similar to those of white consumers, the complex needs of the nonwhite consumers warrant additional staff resources and culturally sensitive treatment programs.

Kessler RC, Nelson CB, McGonagle IK, Edlund MJ, Frank, R.G, Leaf, PJ. **The epidemiology of co-occurring addictive and mental disorders: Implications for prevention and service utilization.** Am J Orthopsych, 66(1):17-31, 1996.

This article presents general population data from the National Comorbidity Survey concerning persons with co-occurring mental health and substance use disorders. Findings indicate that co-occurrence is highly prevalent in the general population and is usually due to the association of a primary mental disorder with a secondary addictive disorder. It is also associated with a significantly increased probability of treatment, although the finding that fewer than half of the cases with 12-month co-occurrence received any treatment in the year prior to interview suggests the need for greater outreach efforts.

Lehman AF. **Heterogeneity of person and place: Assessing co-occurring addictive and mental disorders.** Amer J Orthopsych, 66(1):32-41, 1996.

Appropriate treatment for clients with co-occurring addictive and mental disorders is hampered by difficulties in diagnosing this population and in identifying and delivering necessary services via agencies that typically focus on only a portion of these clients' problems. This paper considers common pitfalls in assessment across settings and suggests approaches to identifying and meeting the needs of clients with multiple problems.

North CS, Smith EM, Pollio DE, Spitznagel EL. **Are the mentally ill homeless a distinct homeless subgroup?** Ann Clin Psychiatry, 8(3):117-28, Sept 1996.

The question has been raised whether it is useful or meaningful to dichotomize the homeless population by mental illness - i.e., to consider the mentally ill homeless as distinct from other homeless people. The current article presents evidence from a single data set to address this question empirically. Data from a randomly sampled population of 900 homeless men and women systemically interviewed using the Diagnostic Interview Schedule were examined to determine associations of mental illness with the problems of homelessness, controlling for the presence of substance abuse in the analyses. Although a few clinically meaningful associations with mental illness were found that might suggest directions for appropriate interventions, mental illness did not differentiate individuals in many important demographic and biographic respects. Individual diagnoses did not perform much better in differentiating the homeless by mental illness. Schizophrenia and bipolar mania showed a few significant associations not identified by the "major mental illness" construct. Major depression, constituting the majority of nonsubstance Axis I disorder in the homeless, provided no association beyond that obtained with the "major mental illness"

category. The data provide little support for conceptualizing homeless subgroups or homelessness in general on the basis of mental illness alone. To do so also risks neglecting the emotional distress of the majority without major mental illness and the other problems that homeless persons share regardless of psychiatric illness. While serious mental illness is overrepresented among the homeless, it represents just one of many important vulnerability factors for homelessness. Substance abuse is far more prevalent than other Axis I disorders. Media images equating homelessness with major mental illness unnecessarily stigmatize homeless people and encourage oversimplified and narrowly conceived psychiatric interventions. While continuing attention is needed on improving identification and management of serious mental illness among the homeless, this must be accomplished within the broader context of social and economic aspects of homelessness.

Osher FC. **A vision for the future: Toward a service system responsive to those with co-occurring addictive and mental disorders.** Amer J Orthopsych, 66(1):71-6, 1996.

The author explains that co-occurring addictive and mental disorders identified by providers, family members, administrators, and consumers are an issue creating frustration, high costs, and a profoundly negative impact on quality of life. With empirical research and clinical experience supporting the effectiveness of integrated approaches, the author considers the systemic division of addictive and mental health services, and contends that a change toward integrated systems of care is likely to benefit the mental health and addiction treatment needs of all people, not just those with co-occurring disorders.

Osher FC, Dixon LB. **Housing for persons with co-occurring mental and addictive disorders.** New Direct Ment Health Serv, 70:53-64, 1996.

This article discusses existing housing barriers for persons with co-occurring mental health and addictive disorders and suggests housing, treatment, and support services responsive to the needs of this population. The authors discuss how homelessness and housing instability can exacerbate addiction and mental illness, and how access to appropriate housing is a critical component of care for persons with co-occurring disorders. The authors discuss why persons with dual diagnoses are at risk for housing instability and homelessness, clinical strategies that facilitate stable housing, and housing strategies to facilitate recovery.

Osher FC, Drake RE. **Reversing a history of unmet needs: Approaches to care for persons with co-occurring addictive and mental disorders**. Amer J Orthopsych, 66(1):4-11, 1996.

Individuals with co-occurring addictive and mental disorders are particularly vulnerable to negative outcomes. Historically, they have been treated either in mental health or addiction service settings and sometimes excluded from receiving any services at all. This article presents an overview of the prevalence and clinical correlates of co-occurring disorders, and of the historical development of separate care systems for mental and addictive disorders.

Robertson M, Zlotnick C, Pegas H, Matteo T, Kaplan E, Clark R. **The Bonita House model: Intense early engagement of adults with dual diagnosis in residential treatment.** Berkeley, CA: Alcohol Research Group, 1996.

This manual describes the impact of the Bonita House Model program, which is designed to engage dually diagnosed adults in a residential treatment program after discharge from a locked psychiatric facility. Topics include: the dually diagnosed crisis population literature review; the evaluation site, Bonita House

residential treatment program; the nature of the intervention, intense early engagement; methods; baseline data and key differences between experimental and comparison groups; the intervention, intense early engagement; long-term outcomes; retention and long-term outcomes; and policy implications.

Sciacca K, Thompson CM. **Program development and integrated treatment across systems for dual diagnosis: Mental illness, drug addiction and alcoholism, MIDAA.** J Ment Health Admin, 23(3):288-97, 1996.

Numerous bureaus of mental health, drug addiction, and alcoholism are designated to provide service to persons who have a discrete, singular disorder of mental illness, drug addiction or alcoholism. Mental health and substance abuse programs (nationally and internationally) have evolved with this singular, limited service capacity. Contrasting incompatible philosophies and treatment methods across the systems have resulted in minimal services for persons with dual diagnosis. The project the authors have outlined is an example of the development of a dual/multiple disorder program that integrates these diverse systems and provides comprehensive services within each of the programs within each delivery system. These programs are cost effective: they utilize existing facilities; train and cross-train existing staff; correct the issues of incompatible treatment interventions; and end the dilemma of gaps in services systems and limited referral resources. As a result, the availability and quality of care for persons with dual diagnosis is greatly improved.

Shumway M, Cuffel BJ. **Symptom heterogeneity in comorbid alcohol disorder.** J Ment Health Admin, 23(3):338-47, 1996.

The heterogeneity of signs and symptoms of alcohol disorder was examined in a community sample of 1,955 persons with either alcohol disorder alone or alcohol disorder plus one of four categories of major mental disorder (antisocial personality disorder, schizophrenia, affective disorder, anxiety disorder). When all diagnostic categories were combined, persons with comorbid mental and alcohol disorders showed evidence of more severe alcohol-related symptoms than did persons with alcohol disorder alone. Distinct symptom patterns distinguished the four diagnostic groups, reflecting heterogeneity in the manifestation of comorbid alcohol disorder. Most notably, comorbid antisocial personality disorder and schizophrenia were associated with higher levels of alcohol consumption and more severe social consequences of alcohol use. These findings substantiate the need for development of specialized dual diagnosis programs and suggest that additional specialization may be required to address diagnostic group differences in the characteristics of comorbid alcohol disorder.

Zlotnick C, Robertson MJ. **Sources of income among homeless adults with major mental disorders or substance use disorders**. Psychiatr Serv, 47:147-51, Feb 1996.

OBJECTIVE: Document sources and amounts of income among homeless adults with major mental or substance use disorders and examine whether income varied by diagnostic group and whether those who received case management are more likely to have income. METHODS: 564 homeless adults from a countywide sample completed structured interviews. Respondents were divided into four groups--those with current major mental disorders, substance use disorders, dual disorders, and no disorders. Income from entitlement benefits, formal sector employment, informal-sector employment, and other sources was documented by group. Logistic regression analysis was used to examine relationships between income sources, case management, and diagnostic groups. RESULTS: Although informal-sector income was the most common income source, it provided the fewest median dollars per month ($42). Entitlement benefits provided the most monthly income ($340) and was the second most common source. Respondents with

major mental disorders, substance use disorders, or dual disorders were no less likely than those with no disorders to report income from entitlement benefits or formal-sector employment. Among those with major mental disorders, substance use disorders, or dual disorders, respondents who had recent case management were four to nine times more likely to report entitlement income. CONCLUSIONS: The results support other research and anecdotal findings on the importance of case management in obtaining entitlement income among homeless adults with major mental or substance use disorders.

1995

Barry KL, Fleming MF, Greenley J, Widlak P, Kropp S, McKee D. **Assessment of alcohol and other drug disorders in the seriously mentally ill.** Schizophr Bull, 21(2):313-21, 1995.

Brief assessment methods are needed to determine the presence of alcohol and drug problems in persons with severe mental illness. The purpose of this study was to determine the prevalence of alcohol and other drug problems in a rural population of 253 clients with severe mental illness and to determine the accuracy of case manager responses to specific alcohol and drug assessment questions about their clients. Clients were assessed for the presence of past and present alcohol and drug disorders by means of a face-to-face diagnostic interview. The specific questions the case managers were asked to complete were designed to assess the quantity and frequency of recent alcohol and drug use and the presence of three criteria for alcohol or drug dependence and to differentiate present versus past history of substance problems. On the basis of the Diagnostic Interview Schedule- Revised, 35% of the clients met current DSM-III-R alcohol or drug criteria for abuse, dependence, or both. There were differences between client and case manager reports on the clients' use of alcohol, marijuana, cocaine, narcotics, and unprescribed tranquilizers in the last year. The best predictor of a client's present alcohol or drug problem was whether the case manager thought that the client had substance use problems at some time in his or her life (sensitivity=0.86; specificity=0.75). This report provides additional evidence that case manager reports are a valid method of determining the prevalence of substance use problems in persons with severe mental illness.

Bartels SJ, Drake RE, Wallach MA. **Long-term course of substance use disorders among patients with severe mental illness.** Psych Serv, 46(3):248-51, 1995.

This study assessed the long-term course of substance abuse and dependence among patients who have mental illnesses. A prospective, seven-year follow-up of outpatients who had serious mental illnesses (most with schizophrenia and schizoaffective disorder) successfully located and reassessed 79% of the patients from the original study group. The follow-up study group was assessed for alcohol and drug use at baseline and seven-year follow-up. The prevalence of active substance use disorder changed little from baseline to follow-up. However, those with initial alcohol abuse had a higher rate of remission than those with initial alcohol dependence. This suggests that distinguishing between abuse and dependence may have important implications for assessment and prognosis of individuals with a dual diagnosis of a substance use disorder and serious mental illness.

Brady KT, Roberts JM. **The pharmacotherapy of dual diagnosis.** Psych Ann, 25(6):344-52, June 1995.

The interaction between psychopathology and substance use disorders is complex. Psychopathology may act as a risk factor for addictive disorders; psychopathology may modify the presentation and treatment of addictive disorders; and many psychiatric symptoms emerge during the course of chronic intoxication and withdrawal. Because of the complexity of these interactions, questions concerning pharmacotherapeutic

strategies are also complex. The authors discuss diagnostic issues, pharmacotherapeutic agents, and psychosocial treatments. Psychiatric disorders -- schizophrenia, affective disorders, anxiety disorders, attention deficit hyperactive disorder, and eating disorders -- are discussed.

Brown VB, Huba GJ, Melchior LA. **Level of burden: Women with more than one co-occurring disorder.** J Psychoac Drug, 27 (4), Oct-Dec 1995.

Using an expanded concept of level of burden, the impact of multiple problems experienced by women in a residential drug abuse treatment program on treatment retention and outcomes, is investigated. Level of burden is defined as the number and severity of problems, including psychological problems, cognitive impairment, chronic health problems, HIV/AIDS status, as well as substance abuse. Results indicate that in the early course of treatment high-burden clients tend to be the highest risks for early termination.

Burnam MA, Morton SC, McGlynn EA, Petersen LP, Stecher BM, Hayes C, Vaccaro JV. **An experimental evaluation of residential and nonresidential treatment for dually diagnosed homeless adults**. J Addict Dis, 14(4):111-34, 1995.

Homeless adults with both a serious mental illness and substance dependence (n=276) were randomly assigned to: (1) a social model residential program providing integrated mental health and substance abuse treatment; (2) a community-based nonresidential program using the same social model approach; or (3) a control group receiving no intervention but free to access other community services. Interventions were designed to provide three months of intensive treatment, followed by three months of nonresidential maintenance. Subjects completed baseline interviews prior to randomization and reinterviews 3, 6, and 9 months later. Results showed that, while substance use, mental health, and housing outcomes improved from baseline, subjects assigned to treatment conditions differed little from control subjects. Examination of the relationship between length of treatment exposure and outcomes suggested that residential treatment had positive effects on outcomes at three months, but that these effects were eroded by six months.

Burns BJ, Santos AB. **Assertive community treatment: An update of randomized trials**. Psychiatr Serv, 46(7):669-75, July 1995.

OBJECTIVE: Results of randomized clinical trials of assertive community treatment for seriously mentally ill patients published between 1990 and 1994 are reviewed to synthesize the state of knowledge about this research and to clarify continuing research directions. METHODS: Randomized trials of interventions that used treatment principles and practices consistent with the Program for Assertive Community Treatment model or close adaptations whose results were published since 1990 were identified by literature searches using MEDLINE and PsychLit and by contact with investigators of ongoing trials. RESULTS: Controlled clinical trials have been conducted with a wide range of severely mentally ill populations, including patients in Great Britain, patients with recent-onset schizophrenia, veterans, dually diagnosed clients, and homeless persons. Methodological improvements in some studies include increased attention to monitoring the experimental and comparison interventions, as well as larger sample sizes and longer duration of the clinical trials than in earlier efficacy trials. Strong positive effects of assertive community treatment on hospital days and on patient and family satisfaction were found. Gains in functional outcomes, such as employment, may require interventions specifically targeted to these outcomes. CONCLUSIONS: Questions about the role of assertive community treatment as time-limited treatment, as an adjunct to other services and treatment, or as a comprehensive and continuous service system for adults with severe mental illness require further research. The growing research base should provide valuable information on costs, outcomes, and indications for assertive community treatment that can be evaluated by policy-makers.

Center for Mental Health Services and Center for Substance Abuse Treatment. **Executive summaries from 16 federally-funded programs for homeless individuals with co-occurring mental health and substance use disorders.** Rockville, MD: Center for Mental Health Services and Center for Substance Abuse Treatment, 1995.

The Center for Mental Health Services (CMHS) and the Center for Substance Abuse Treatment (CSAT) have collaboratively funded demonstration programs to document, in manual form, innovative programs for homeless individuals with co-occurring mental health and substance use disorders. The program was implemented in two phases. The first phase sought to document and create evaluation plans for the most promising approaches to the treatment of alcohol, drug abuse, and mental illness among this target population. Sixteen programs were selected to develop intervention manuals. The second phase supported the detailed evaluation of six of these interventions. The executive summaries from all 16 program manuals are included in the report.

Drake RE. **Research on treating substance abuse in persons with severe mental illness.** Rockville, MD: National Institute of Mental Health, 1995.

The author explains that those with dual diagnosis have higher rates of clinical relapse, rehospitalization, depression and suicidality, violence and legal problems, incarceration, unstable housing and homelessness, HIV infection, noncompliance with treatment, and increased family problems. To counter such problems, newer programs offer integrated, or combined treatments. Integrated treatment programs that involve the same clinicians or team of clinicians in providing both mental health components and substance abuse components for concurrent delivery are discussed. The author reviews 10 research studies concerning the course of substance abuse in people who have serious mental illness in the usual treatment system and 32 studies of integrated treatment program.

Greenfield SF, Weiss RD, Tohen M. **Substance abuse and the chronically mentally ill: A description of dual diagnosis treatment services in a psychiatric hospital.** Comm Ment Health J, 31(3):265-77, 1995.

Between 20% and 70% of psychiatric patients have a co-occurring substance use disorder and rates of substance abuse among patients with psychotic disorders are especially high. Patients with co-existing psychosis and substance use disorders typically have poorer outcomes than patients diagnosed with either disorder alone. Frequently, treatment services for such dually diagnosed patients are not integrated and organizational barriers may impede the appropriate detection, referral, and treatment of these patients. This article reviews the epidemiology and treatment outcome for patients dually diagnosed with chronic mental illness (usually psychotic disorders) and substance use disorders. The article then presents a description of a dual diagnosis referral and treatment service in a large private, non-profit psychiatric hospital.

Kales JP, Barone MA, Bixler EO, Miljkovic MM, Kales JD. **Mental illness and substance use among sheltered homeless persons in lower-density population areas.** Psychiatr Serv, 46:592-5, June 1995

OBJECTIVE: This study examines a sheltered homeless population in two counties of lower-density population in central Pennsylvania, to assess the prevalence of mental illness and substance abuse. METHODS: 81 homeless adults from 9 emergency shelters were interviewed using a structured questionnaire. RESULTS: The estimated lifetime prevalence rate of major depressive disorder was 26.6% and 6.4% of the sample showed evidence of psychotic thinking. Almost one-third reported previous hospitalization for emotional problems. About one-third reported a suicide attempt. The estimated lifetime

prevalence rate of alcohol or drug abuse or dependence was almost 60%. CONCLUSIONS: Although mental illness, especially psychosis, and substance abuse may be somewhat less prevalent among homeless persons in lower-density population areas than in large urban areas, they are still significant problems.

Lambert D, Ralph R O, Muskie ES. **Cumberland County dual diagnosis collaborative.** Portland, ME: Cumberland County Dual Diagnosis Collaborative, 1995.

This report describes Maine's Dual Diagnosis Demonstration Program. The program began in Spring 1993, funded by The Robert Wood Johnson Foundation, The Bingham Program, Maine's Office of Substance Abuse, and Maine's Medicaid Program. The 3-year program serves the greater Cumberland County area and has been developed and is administered by the Cumberland County Dual Diagnosis Collaborative (CCDDC), comprised of service providers, consumers, and local and state government officials. Clients with concurrent major mental illness and clinically significant substance abuse are randomly assigned to one of two treatments: (1) a continuous treatment team model (ACCESS); and (2) enhanced community care services (ECCS) provided through coordination of community-based agencies.

Office of Inspector General. **Services to persons with co-occurring mental health and substance abuse disorders: Program descriptions.** Washington, DC: U.S. Department of Health and Human Services, 1995.

This report, the first in a two part series, describes 30 programs nationwide that serve people with co-occurring mental health and substance use disorders within a community setting. The data for the report were collected during the National Comorbidity Survey conducted between 1990 and 1992 by the Office of the Inspector General, Department of Health and Human Services. AVAILABLE FROM: Office of Inspector General, U.S. Department of Health and Human Services, 330 Independence Ave. SW, Washington, DC 20201, (202) 619-1142. (COST: FREE)

Ridgely MS, Osher FC, Johnson J. **Integrating clinical care for people with co-occurring mental health and substance abuse disorders.** Baltimore, MD: The University of Maryland at Baltimore and State of Maryland, Mental Hygiene Administration, 1995.

This curriculum is designed for community mental health and substance abuse workers serving people who have co-occurring mental health and substance use disorders. Issues addressed include current approaches to community mental health and addiction treatment and the integration of the two into a single program of care. Participants in the curriculum are expected to complete required readings, attend didactic training sessions, and participate in training exercises designed to improve their knowledge and skill in assessing and treating people with co-occurring disorders.

Rosenheck R. **Substance abuse and the chronically mentally ill: Therapeutic alliance and therapeutic limit-setting** [comment] Comm Ment Health J, 31:283-5, June 1995.

Saxon AJ, Calsyn DA. **Effects of psychiatric care for dual diagnosis patients treated in a drug dependence clinic.** Amer J Drug Alcoh Abus, 21(3):303-13, 1995.

This study examines outcome of treatment for psychoactive substance dependence in a clinic that made psychiatric care readily available. Veterans entering outpatient treatment for substance dependence also received psychiatric evaluation. Outcomes were compared for patients with dual diagnosis and with

substance only diagnosis. Psychotropic medications were prescribed for 80.4% of the dual diagnosis subjects. In the first six months of treatment, dual diagnosis subjects compared to substance only diagnosis subjects gave a significantly greater percentage of testing positive for cocaine and opioids. In the second six months, those dual diagnosis subjects testing positive for cocaine and opioids was reduced significantly while the results for the substance only group did not change. Treatment retention of dual diagnosis subjects exceeded that of substance only diagnosis subjects. Dual diagnosis patients may initially perform more poorly than substance only diagnosis patients in substance dependence treatment. However, in the presence of psychiatric care, they eventually exhibit comparable success.

Segal SP, Silverman C, Temkin T. **Characteristics and service use of long-term members of self-help agencies for mental health clients**. Psych Serv, 46(3):269-74, 1995.

This study examined the characteristics of long-term members of self-help agencies, managed and staffed by mental health clients. The study examined why long-term members sought help from these agencies, and how they differed from clients of community mental health agencies. Survey and assessment instruments were used to obtain information on the service utilization of 310 long-term agency members as well as on their resources, history of disability, functional status, psychological disability, and health problems. The self-help agencies served a primarily African-American population, many of whom were homeless. They had sought help from the self-help agencies primarily for resources such as food or clothing, for "a place to be." Obtaining counseling or help for substance or alcohol abuse was a less important reason for coming to the self-help agencies. A high proportion of the persons served by the self-help agencies in the study had a dual diagnosis of mental disorder and substance abuse. The self-help agencies provided their clients with material resources while community mental health agencies provided psychotherapeutic and medical care.

Sibthorpe B, Drinkwater J, Gardner K, Bammer G. **Drug use, binge drinking and attempted suicide among homeless and potentially homeless youth**. Aust N Z J Psychiatry, 29:248-56, June 1995.

In order to assess the need for drug-related services for at-risk youth, a survey was conducted among young people aged 12-17 years who, owing to severe family discord, were currently living away from home (homeless) or had experienced periods away from home in the past 12 months (potentially homeless). Prevalence of use and of potentially harmful levels of use of alcohol and other licit and illicit drugs were higher than in a comparative population. Of the 155 people interviewed, 54% reported past physical abuse, 28% reported past sexual abuse, and 73% had a family alcohol or other drug history. Of the total, 62% had been in a youth refuge at some time in the past 12 months. Twenty four per cent had been to hospital as a result of alcohol or other drug use and 45% had attempted suicide. Female sex and an interaction between sexual abuse and binge drinking predicted suicide attempts. This study points to the need for a comprehensive approach to interventions for troubled youth which gives greater recognition to mental health issues related to family circumstances, including abuse.

Smith EM, North CS, Fox LW. **Eighteen-month follow-up data on a treatment program for homeless substance abusing mothers.** J Addict Dis, 14(4):57-72, 1995

In response to the dearth of data on substance abuse treatment among homeless mothers, this study breaks new ground in presenting 18-month follow-up data on 149 homeless mothers with young children enlisted in a substance abuse treatment program. The effects of residential compared to nonresidential services were evaluated over the follow-up period. Although dropout rates were high, predictors of dropout were identified, and the residential had a lower dropout rate compared to the nonresidential comparison group.

Members of both residential and nonresidential groups evidenced improvement in alcohol and drug problems and in housing stability, regardless of the amount of time they spent in the program. This project demonstrated that homeless mothers can be more successfully engaged in substance abuse programs with provisions of residential placement in addition to participation in a therapeutic community. Future interventions can take advantage of this knowledge in designing more effective programs.

Wenzel SL, Bakhtiar L, Caskey NH, Hardie E, Redford C, Sadler N, Gelberg L. **Homeless veterans' utilization of medical, psychiatric, and substance abuse services**. Med Care, 33:1132-44, Nov 1995.

This study focuses on the association between homeless veterans' prior utilization of medical, psychiatric, and substance abuse services and biopsychosocial characteristics reported at admission into a domiciliary care program. Given the large number of veterans in the US homeless population and their health care needs, understanding factors associated with health service use among homeless veterans is significant. Research participants were 429 homeless male veterans who had been admitted to the Domiciliary Care for Homeless Veterans Program site at the West Los Angeles Veterans Affairs Medical Center between February 1988 and July 1992 for treatment of medical, psychiatric, or substance disorders. Results of logistic regression analyses indicated that self-reported need (chronic medical problems, serious psychiatric symptoms, combat stress, alcohol use) and evaluated need for care (evidence of liver dysfunction) were important to veterans' use of health services in the six months before program admission. Predisposing social structure factors (education, residential stability, and usual sleeping place) were also significant predictors of service utilization. Overall, need factors were more strongly related to service use. Supplementary logistic regression analyses indicated that comorbidity of need factors deserves attention in understanding homeless veterans' use of services. In conclusion, it is important to attend to predisposing social structure factors as potential barriers to care for homeless veterans.

1994

Anchorage Community Mental Health Services. **Crossover house homeless project: An outreach intervention for homeless adults experiencing severe mental illness and substance use disorders.** Anchorage, AK: Anchorage Community Mental Health Services, 1994.

This document contains information focusing upon an approach to serving individuals who are homeless and experiencing dual diagnosis conditions in the earliest phase of service delivery. A conceptual framework is provided to describe the Crossover House's outreach intervention model. Other topics discussed include: the history and setting of intervention; a literature review; client population; program structure; outreach intervention; specific case studies; and lessons learned and recommendations from the authors. AVAILABLE FROM: Southcentral Counseling Center, Crossover House, 1000 E.4th Ave., Anchorage, AK 99501.

Bassuk EL. **Community care for homeless clients with mental illness, substance abuse, or dual diagnosis.** Newton, MA: The Better Homes Fund, 1994.

Many homeless individuals who use shelter facilities have serious mental illnesses and/or substance use disorders. Shelter staff though, are not always equipped to serve them. The purpose of this manual and companion video is to equip shelter staff with the conceptual and practical tools they need to ensure high quality care to this population. The manual and video approach this objective by: (1) providing information about the characteristics and needs of this subgroup and the resource available to meet these needs; (2)

discussing the skills necessary to establish a helping relationship, to identify and manage crises, and to meet longer-term needs through ongoing assessment and referral; and (3) using the knowledge and skills to design specialized services, such as outreach, and to modify existing policies and procedures in order to serve this population.

Block AJ, Gabriel RM. **Descriptive manual of Mental Health Services West's dual diagnosis program.** Portland, OR: RMC Research Corporation, 1994.

Mental Health Services West is a private, non-profit mental health agency that offers a wide range of treatment and rehabilitation services in the urban core of Portland, Ore. It is the primary mental health provider in the city for people who are homeless and who have mental illnesses and a leader in the provision of services to individuals with co-existing psychiatric and substance abuse diagnoses. In September 1992, a full-day dual diagnosis program was established that employs an integrated treatment model of services including: (1) availability of a wide range of services; (2) flexible use of program components to meet individual needs; (3) integration of relapse prevention into the program as an educational tool; and (4) intensive monitoring of clients by dual diagnosis staff. This manual provides an overview of the conceptual framework for the program, discusses the setting and history of the intervention, lessons learned, and recommendations for improvement of the model.

Caton CL, Shrout PE, Eagle PF, Opler LA, Felix A. **Correlates of codisorders of homeless and never homeless indigent schizophrenic men.** Psychol Med, 24:681-8, Aug 1994.

We recently completed a case control study of 100 literally homeless and 100 never homeless indigent schizophrenic men in New York City, in which concurrent substance abuse and antisocial personality disorder were widespread. In this paper we probe the correlates of 'pure' schizophrenia (single disorder, n=60), schizophrenia and substance abuse (double disorder, n=9), and schizophrenia, substance abuse, and antisocial personality disorder (triple disorder, n=50), across the homeless/ never homeless distinction. Subjects were recruited from a homeless shelter and mental health service programs in Upper Manhattan. Psychologist and social worker interviews administered the Structured Clinical Interview for DSM-III-R, I, and II and other structured instruments to explore social, family, and illness history, the current illness and aspects of treatment and family support. Codisorder subjects emerged from more disadvantaged family backgrounds, experienced greater school difficulties, began drug use in early adolescence, were more prone to hyperactivity in childhood, and were more likely to have spent time in jail. While codisorder groups did not differ on key aspects of schizophrenia, the triple disorder group was found to suffer from a more severe form of substance abuse than double disorder subjects, associated with an earlier age of onset and abuse of a wider array of substances. The widespread prevalence of codisorders among indigent schizophrenic men has major significance for clinical psychiatry. Study of the correlates of codisorders has revealed important differences in social, family and illness history that may guide the development of more effective treatments and improved service delivery.

Greenbaum PE, Foster-Johnson L, Petrila A. **Co-occurring disorders in adolescence: Serious emotional disturbances and substance use disorders, service needs for a vulnerable population.** Rockville, MD: Center for Mental Health Services, 1994.

The purpose of this report was to gather comprehensive information on the status of adolescents who have been identified or may need to be identified as having both a serious emotional disturbance and substance use disorder. Information gathered on this population included: (1) the prevalence of the population; (2) the assessment instruments available and their utility; (3) proposed services with state-of-the-art practices

identified; (4) the current state of services and efforts; (5) policies that should be addressed at the federal, state, and local levels; and (6) research areas that need to be addressed. Findings indicate that there is often very little common ground between the various systems serving adolescents and adults with co-occurring mental and substance abuse disorders.

Jones K, Colson P, Valencia E, Susser E. **A preliminary cost effectiveness analysis of an intervention to reduce homelessness among the mentally ill**. Psychiatr Q, 65(4):243-56, Winter 1994.

The Critical Time Intervention Project is a three-year clinical trial which tests a time-limited, supportive intervention to reduce recurrent homelessness among mentally ill men moving from a shelter to the community. Along with a comparison of nights spent homeless and other outcomes, the evaluation of the Critical Time Intervention includes a comparison of the relative costs of the intervention, compared to usual treatment. Such cost effectiveness analyses are difficult to perform and are rarely applied to mental health treatments. This paper presents the general scheme of this analysis and discusses critical issues in the construction and measurement of cost variables. Implications for the cost analysis are presented.

Lehman AF, Myers CP, Dixon LB, Johnson JL. **Defining subgroups of dual diagnosis patients for service planning.** Hosp Comm Psych, 45(6):556-61, 1994.

According to the authors, patients with comorbid psychiatric and substance use problems are challenging the limits of mental health service systems. One of the problems encountered in planning for these patients is the wide heterogeneity of their comorbidity. This article describes and evaluates a relatively simple conceptual framework for defining subgroups among patients with co-occurring mental illnesses and substance use disorders. Findings indicated that three of the four subgroups identified -- patients with current definite dual diagnoses; those with current possible dual diagnoses; and those with past definite dual diagnoses -- were similar enough to be served primarily in the mental health care system. However, patients in the remaining group, those with substance-induced organic mental disorders, were distinctly different and better served in the substance abuse treatment system. The authors contends that the framework developed has potential utility for distinguishing subgroups of patients with co-occurring mental illnesses and substance use disorders relevant for service planning.

McKenna C, Ross C. **Diagnostic conundrums in substance abusers with psychiatric symptoms: Variables suggestive of dual diagnosis**. Am J Drug Alcoh Abus, 20:397-412, Nov 1994.

Patients with substance dependence and psychiatric symptoms often present a diagnostic conundrum because each of these problems may mutually and reciprocally complicate the other. This may challenge the ability to identify dual diagnosis patients who have both a substance abuse disorder and a definitive symptom-based psychiatric disorder. The main purpose of this study was to identify variables suggestive of dual diagnosis in the population of substance-dependent patients with psychiatric symptoms. A secondary purpose was to examine the subgroups in this population for their distinctiveness from one another. Based upon clinical experience and the literature, seven independent variables were hypothesized as suggestive of dual diagnosis. Seventy-nine patients with substance dependence and psychiatric symptoms of depression, anxiety, and/or psychosis were assessed for symptom and disorder status generating three subgroups: (1) 20 patients with psychiatric symptoms not meeting thresholds for clinical significance; (2) 36 patients exhibiting a psychiatric disorder (dual diagnosis); and (3) 23 patients with psychiatric symptoms meeting thresholds for clinical significance but not for a disorder. A persistent increased risk for dual diagnosis was observed in patients who were positive for the seven variables. The seven variables were combined into an overall measure of patients' risk for dual diagnosis. Mean scores

were significantly different for the three groups F(2, 76) = 8.4. This study indicates variables that may be suggestive of dual diagnosis and finds subgroup distinctiveness in this sample. Both of these findings have treatment implications.

Riley JA. **Dual diagnosis: Comorbid substance abuse or dependency and mental illness.** Ment Health Nurs, 29(1):29-35, 1994.

This article describes the concomitance of drug abuse and dependency and psychiatric disorder. The recent recognition of this phenomenon presents a new challenge for psychiatric and mental health nursing practice. The psychiatric-mental health nurse is in a unique role to contribute to the care of these clients. Current literature on the development of integrated and hybrid treatment models consistently mentions the presence and role of nurses as an integral member of the treatment team. The author contends that for nursing to fully realize this challenge and opportunity, it is imperative that nursing education respond.

Winarski JT, Dubus P. **An analysis of 16 federally funded programs for homeless individuals with co-occurring mental health and substance use disorders.** Rockville, MD: Center for Mental Health Services/ Center for Substance Abuse Treatment, 1994

The Center for Mental health Services (CMHS) and the Center for Substance Abuse Treatment (CSAT) have collaboratively funded a demonstration to document innovative programs for homeless individuals with co-occurring disorders. This report summarizes and analyzes the phase one demonstration, which documents interventions and develops evaluation plans for promising approaches to the treatment of alcohol, drug abuse and mental illness. Sixteen demonstration programs represent major types of service provided to homeless people who have co-occurring mental health and substance use disorders, and cover a demographic and geographic range that represent a cross section of the nation. It includes common themes and distinguishing factors such as: critical client characteristics and practitioner responses; program structures; diagnostic procedures; planning and coordination processes; and treatment processes. In addition, this report examines the major clinical issues confronting service providers, including a description of common barriers to success. A perpective on the continuum of care and factors affecting the "seamlessness" of services within the delivery system are also described.

1993

Blankertz LE, Cnaan RA. **Serving the dually diagnosed homeless: Program development and interventions.** J Ment Health Admin 20(2):100-12, 1993.

In this paper the authors present characteristics of persons with dual diagnosis of severe mental illness and substance abuse and describe a hybridized program and interventions which have been empirically shown to be effective in working with these multiply impaired individuals. The article is based upon a three-year demonstration project funded by the National Institute of Alcoholism and Alcohol Abuse. The following interventions were found to be effective: engagement, care and nurturing, structure, limit setting and the development of responsibility, positive reinforcement, and self esteem. The authors describe these interventions and highlight their impact in both staff management and working with funding sources.

Blankertz LE, Cnaan RA, Freedman E. **Childhood risk factors in dually diagnosed homeless adults.** Soc Work, 38(5):587-96, Sept 1993.

Although the negative long-term effects of specific childhood risk factors--sexual and physical abuse, parental mental illness and substance abuse, and out-of-home placement--have been recognized, most studies have focused on just one of these risks. This article examines the prevalence of these five childhood risk factors among dually diagnosed (mentally ill and substance abusing) homeless adults in rehabilitation programs. It further assesses the impact of each risk factor individually and in combinations of two on the social functioning skills and rehabilitation progress of these multiply disadvantaged clients.

Chappel JN. **Training of residents and medical students in the diagnosis and treatment of dual diagnosis patients.** J Psychoac Drug, 25(4):293-300, Oct-Dec 1993.

Treatment of dual diagnosis patients requires simultaneous treatment of the addictive and the mental disorders. Available data suggest that this does not happen often. In a survey of several psychiatric services, the unit chiefs reported that dual diagnoses were underreported, no plans were present for combined treatment, families were infrequently involved, and few referrals were made for combined treatment. There is a need for competent, experienced clinician teachers who have had positive experience with the treatment of dual disorders. The training of addiction and mental health professionals must include cooperation, understanding, and respect for each other. Cross-training is needed in chemotherapy, psychotherapy, abstinence from alcohol and other addictive drugs, 12-Step programs, spiritual issues, and milieu therapy. Negative attitudes and ignorance must be overcome for this training to take place. Faculty Fellow training programs have provided a beginning in this direction, but have so far involved few professional schools. Some examples of training with regard to referrals, prescribing, and psychotherapy are given. The importance of supervised clinical experience in treating dual diagnosis patients is emphasized. The provision of this experience provides a challenge to specialists in addiction medicine and addiction psychiatry.

Hospital and Community Psychiatry Service. **Dual diagnosis of mental illness and substance abuse: Collected articles from Hospital and Community Psychiatry.** Washington, DC: American Psychiatric Association, 1993.

This collection of articles from *Hospital and Community Psychiatry* illustrates and documents the ways in which the service needs of many individuals with mental illnesses have been altered over the past quarter of a century. Focusing on clinically distinct subgroups of persons who suffer from a dual diagnosis of an alcohol or substance abuse problem in addition to their mental illness, these papers address an array of diagnostic, clinical and service system issues and point to the need for innovative concepts in patient care. Some of the issues concerning dual diagnosis that are covered include assessment and classification, treatment costs, rates of rehospitalization, compliance with aftercare treatment, inpatient treatment of adolescents, day hospital programs, and barriers to community care. AVAILABLE FROM: American Psychiatric Press, 1400 K Street, N.W., Suite 1101, Washington, DC 20005 (800) 368-5777. COST: $8.50

Lehman AF, Cordray DS. **Prevalence of alcohol, drug, and mental disorders among the homeless: One more time.** Contemp Drug Prob, 20:355-84 1993.

To provide more refined estimates of the prevalence of alcohol, drug and mental health disorders among homeless persons, meta-analytic techniques were applied to a selected set of previously issued studies. Severe Axis I disorders are less prevalent; ranging between .18 and .23. The prevalence of severe and

persistent mental disorders falls within the same range (.19 to .23). The prevalence of any Axis I substance use disorders was estimated to between .45 and .55 among homeless persons in samples included in this review. The co-occurrence of mental health and substance use disorders is estimated at a prevalence between .10 and .20.

North CS, Smith EM. **A systematic study of mental health services utilization by homeless men and women**. Soc Psych Psychiatr Epidem, 28(2):77-83, April 1993.

Psychiatric illness is overrepresented among the homeless, but mental health services are underutilized in this population in proportion to their needs. The current study was concerned with 900 homeless men and women randomly sampled and systematically interviewed with the Diagnostic Interview Schedule; it focuses on psychiatric and substance abuse rehabilitation service patterns and stated needs of this population in relation to specific psychiatric disorders. Although rates of lifetime treatment utilization were fairly high in comparison with general population utilization patterns, rates of treatment in the current year were low. In particular, outpatient services have been neglected for reliance upon inpatient services. Although the major reason cited for not obtaining treatment by homeless persons with mental illness was lack of insurance and inability to pay for it, having health insurance was not associated with mental health services utilization, nor were other important predictors apparent. Mental health professionals serving mentally ill homeless populations would best serve them by focusing on creative and innovative ways to improve the availability and attractiveness of ambulatory care services.

Ridgely S, Dixon L. **Integrating mental health and substance abuse services for homeless people with co-occurring mental and substance use disorders.** Rockville, MD: Center for Mental Health Services, 1993.

This technical assistance report discusses integrating services for homeless persons with co-occurring serious mental health and substance use disorders. Barriers to the care of people with dual diagnoses are identified. They include the lack of common administrative structure, insufficient resources and philosophical differences, and financial barriers. The authors present three models for addressing the structural aspects of services integration for people with dual diagnoses: the integrated service model; the parallel service model; and the linkages service model. Federal, state, and local initiatives for integrating services are described.

Rosenheck R, Gallup, Frisman LK. **Health care utilization and costs after entry into an outreach program for homeless mentally ill veterans.** Hosp Comm Psych, 44(12):1166-71, Dec 1993.

OBJECTIVE: This study evaluated the impact of a Department of Veterans Affairs outreach and residential treatment program for homeless mentally ill veterans on utilization and cost of health care services provided by the VA. METHODS: Veterans at nine program sites (n=1,748) were assessed with a standard intake instrument. Services provided by the outreach program were documented in quarterly clinical reports and in residential treatment discharge summaries. Data on nonprogram VA health service utilization and health care costs were obtained from national VA databases. Changes in use of services and cost of services from the year before initial contact with the program to the year after were analyzed. The relationship of these changes to indicators of clinical need and to participation in the outreach program were analyzed. RESULTS: Although utilization of inpatient service did not increase after veterans' initial contact with the program, use of domiciliary and outpatient services increased substantially. Total annual costs to the VA also increased by 35%, from $6,414 to $8,699 per veteran per year. Both clinical need and participation in the program were associated with increased use of health services and increased cost.

Veterans with concomitant psychiatric and substance abuse problems used fewer health care services than others. CONCLUSIONS: Specialized programs to improve the access of homeless mentally ill persons to health care services appear to be effective, but costly. Dually diagnosed persons seems especially difficult to engage in treatment.

Smith EM, North CS, Spitznagel EL. **Alcohol, drugs, and psychiatric comorbidity among homeless women: An epidemiologic study.** J Clin Psych, 54(3):82-7, March 1993.

BACKGROUND: Very little is known about the mental health of homeless women. This study is one of the first to focus on psychiatric diagnosis and comorbidity in a population of homeless women systematically interviewed with a structured instrument. METHODS: Three hundred homeless women randomly selected from St. Louis shelters were interviewed using the Diagnostic Interview Schedule (DIS). RESULTS: The population of homeless women in St. Louis is predominantly young adult, single, and black; most have young children and average nearly a high school education. Schizophrenia and bipolar affective disorder account for only a small portion of the mental illness in these women. Nearly one in three has a history of substance abuse, with drug abuse being more prevalent than alcoholism. One third of the sample met lifetime criteria for posttraumatic stress disorder. One forth of the women have received inpatient psychiatric care, and the majority with a nonsubstance Axis I diagnosis have received some mental health treatment. CONCLUSIONS: Although major mental illness is overrepresented among these homeless women, the majority do not suffer from major mental illness. Despite the severity of the stressors these women face, the large numbers escaping psychiatric disorders speak to their resilience and to the likelihood that important factors other than mental illness contribute to their homelessness. Future studies to examine positive outcomes and investigate protective factors might provide a valuable source of information on coping with the stresses associated with homelessness and point to more effective interventions.

Undated

Clark W. **Transitions within the continuum of care: Effective referrals for homeless with co-occurring mental illness and substance abuse disorders: the San Francisco model.** San Francisco, CA: City and County of San Francisco, Department of Public Health, Division of Mental Health and Substance Abuse Services, undated.

This manual focuses on a referral intervention for homeless persons with co-occurring substance abuse and mental health disorders that ensures clients move to the next stage of treatment within the continuum of care. The manual provides an overview of the conceptual framework and logic model, a description of the history and setting of the intervention in San Francisco, and a description of the referral intervention and participating treatment programs. Included are program descriptions, referral approaches, and case studies on three of the referring treatment programs. Appendices include sample intake and assessment forms, policy and procedures for referrals, and a listing of programs in the San Francisco Continuum of Care.

Essock SM. **Hope and possibility: Integrated treatment of substance abuse and mental illness for homeless people with dual diagnosis.** Hartford, CT: Connecticut Department of Mental Health and Addiction Services.

This manual discusses the most recent approaches in the treatment of people who are homeless and have both substance abuse and serious mental disorders. The author explains that integrating the treatment of both types of disorders for delivery by assertive community treatment teams and other forms of intensive

case management is a relatively new, and still developing, approach. This manual can be regarded as a document in progress, a framework which will be filled in gradually based on continuing experiences with dually diagnosed homeless people. Topics discussed include: conceptual framework logic model; history and setting of intervention; assertive community treatment (ACT) teams; the treatment process; logic model; engagement; persuasion; active treatment stage; relapse prevention; housing; and recommendations. AVAILABLE FROM: Connecticut Department of Mental Health and Addiction Services, 410 Capitol Avenue, MS #14RSD, P.O. Box 34131, Hartford, CT 06134.

Mullins SD. **Steps out: A peer-integrated outreach and treatment model for homeless persons with co-occurring disorders.** Rockville, MD: Substance Abuse and Mental Health Services Admin., undated.

This manual describes a peer-based treatment initiative designed to assist homeless individuals who suffer from both substance abuse disorders and co-occurring mental illness. The program's central philosophy is that outreach coordinated by staff who were once homeless is an effective means of linking program participants with prevocational and vocational opportunities. Topics discussed include: a conceptual framework; history and setting of the intervention; review of the literature; description of participant population; description of the intervention; case studies; and lessons learned.

National Clearinghouse for Alcohol and Drug Information. **Dual diagnosis.** Rockville, MD: National Clearinghouse for Alcohol and Drug Information, undated.

This bibliography contains information on over 120 publications related to mental illness and substance abuse. AVAILABLE FROM: National Clearinghouse for Alcohol and Drug Information, PO Box 2345, Rockville, MD 20847-2345, (800) 729-6686.

Rhein ME, Small CG (eds). **Mental and substance use disorders: The treatment of dual diagnosis.** Washington, DC: Dual Diagnosis Subcommittee of the Treatment Services Committee, Department of Human Services, Planning, and Public Safety, Metropolitan Washington Council of Governments.

This report on dual diagnosis policy in the Washington metropolitan region examines the nature of co-occurring substance abuse and mental disorders, identifies barriers to effective treatment of the dually diagnosed, and provides recommendations for staff training and program and system design. AVAILABLE FROM: Information Center; Metropolitan Washington Council of Governments; 777 North Capitol Street NE, Suite 300; Washington DC 20002-4226.

Valladeres, E., Zuniga, L., Castro, M., Calero, A., Philhour, P**. Camino Nuevo, a new path: An operations manual for an intensive outpatient program for dually diagnosed individuals.** Miami, FL: Miami Mental Health Center, undated.

Camino Nuevo is an intensive outpatient treatment program for persons with co-occurring mental illness and substance use problems that was developed for clients with very high service needs. Although the program is not exclusively for homeless persons, the authors contend that its structure and strong links with case management make it particularly well suited to serving homeless persons with dual diagnosis. The manual serves as a framework for a detailed evaluation of the program's operation and effectiveness with dually diagnosed homeless persons, and can also serve as a guide for replication of the program.

Vietnam Veterans of San Diego, Inc. **Vietnam veterans of San Diego: Integrated treatment for homeless veterans with co-occurring mental illnesses and substance use disorders.** Rockville, MD: Substance Abuse and Mental Health Services Administration, undated.

Vietnam Veterans of San Diego (VVSD) provides up to one year of intensive residential rehabilitation services to male and female homeless veterans who are dually diagnosed. About half of VVSD's residents are Vietnam veterans, 25% are parolees, and 10% are women veterans. Virtually all are substance-dependent, many suffer from Post-traumatic Stress Disorder (PTSD), and others have major depression or personality or anxiety disorders. The manual describes the residential program and elements essential to providing services. Their approach engages and retains a high proportion of homeless dually diagnosed veterans through to independent living. This treatment manual includes the following: conceptual framework; history and setting of the intervention; literature review; description of client population; description of the intervention; program structure; the treatment process; case studies; and lessons learned.